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ABSTRACT

Five papers on the grammar of Warlpiri, an Australian Aboriginal language, include: "A Tentative Description of Ngardilpa (Warlpiri) Verbs" (Lothar H. Jagst); "Syntactic Structure of Warlpiri Clauses" (Stephen M. Swartz); "A Preliminary Description of Propositional Particles in Warlpiri" (Mary Laughren); "Warlpiri Verb Roots and Preverbs" (David Nash); and "Some Essential Features of Warlpiri Verbal Clauses" (Kenneth Hale). (MSE)

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Series A Volume 6

PAPERS IN WARLPIRI GRAMMAR:
IN MEMORY OF LOTHAR JAGST

Editor: S. Swartz

SUMMER INSTITUTE OF LINGUISTICS
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PREFACE

These Work Papers are being produced in two series by the Summer Institute of Linguistics, Australian Aborigines Branch, Inc. in order to make results of SIL research in Australia more widely available. Series A includes technical papers on linguistic or anthropological analysis and description, or on literacy research. Series B contains material suitable for a broader audience, including the lay audience for which it is often designed, such as language learning lessons and dictionaries.

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LOTHAR H. JAGST

INTRODUCTION TO SERIES A VOLUME 6

By all accounts and recollections, Lothar Jagst (1934 - 1976) was an independent and determined individual. Working under the auspices of the Summer Institute of Linguistics, Australian Aborigines Branch, he, along with his wife Else and four children, commenced work with the Warlpiri people at Hooker Creek (now Lajamanu) in 1969. Already multilingual, he plunged into the acquisition of Warlpiri with the same perfectionist zeal which apparently characterized his previous language experience. It is said by his colleagues that his speech bore no trace of foreign accent, but that he strove to adapt his speech entirely to the local idiom. And even today, those Warlpiris who can be encouraged to speak of this lost friend readily acknowledge that he spoke Warlpiri *pirrjirdi manu jungarni nyayirni*, 'hard and really true'.

Lothar Jagst died unexpectedly while hunting wallaby near Darwin with Kenny Walker Jupurrula, a Warlpiri mate and kinship father. He died as he was just beginning to realize his true ambition, that of translating the Bible into the Warlpiri tongue. But he was more than a Bible translator to the people of Hooker Creek. He was a friend. He gave himself selflessly to a variety of community services: carting firewood and beef to those without, keeping accounts for the local store, repairing automobiles, taking men on hunting trips and to sacred sites, teaching a few to read their own language, and probably much, much more of which I am unaware.

Lothar Jagst left behind, among other things, an incomparable measure of good will. Since 1978 when my wife and I moved to Lajamanu to take up Lothar's work of Bible translation and language study, we have been continually aware that our acceptance has depended in large part upon his legacy and that of his family. I recall that on our first evening in Lajamanu, I was driven several miles out of town to the men's 'sacred business' camp. I was introduced as being like Jakamarra, doing what he had done, learning the language, translating the Bible. As one by one the old men shook hands with me I felt they were shaking hands with a friend from long ago.

This volume has been compiled in memory of Lothar Jagst. The first paper is a previously unpublished work by Lothar, written sometime around 1972 but never completed. It was only recently discovered in a collection of his files. The orthography has been changed to conform to current use, but apart from this and a few minor editorial changes, the paper is presented as he wrote it. The other papers have been graciously submitted in his memory by Drs. Nash, Hale, and Laughren, who each have spent considerable time and energy studying the Warlpiri language. I, who have benefited greatly from previous work by all the others, also submit my paper in his memory.

One final tribute to Lothar Jagst is included, written by Maurice Luther Jupurrula, a Warlpiri man who knew him and on occasion assisted him in his language study. It is reproduced here as it was written in Warlpiri with the English translation following.

> *Nyampu karna yirrarni manngi nyanjakarrarlu Jilpirlwanakurlu, Jakamarrakulu. Kujarnalu yirrarnu nganimpanyangurla yardayardarla, walya nganimpanyangurla. Puntu manu wapirralparna ngarrurnu. Jarlupatu ngajunyangu warrawarrakangujana. Kangulpajana wirlinyi manu manjiki. Ngulangka karna purda nyanyi ngajunyangu mikilyirla. Ngajunyangu Warlpiri rdirri yungu jaru wangkanjaku manu yirrarninjaku pipangka. Wapirrakurlangu jaru kapu yirrakarla pipangka Warlpirikirli ngajunyangurla jarungka. Kapurna tarnngangku purda nyanyi ngurrjunyayirni Jakamarra. Kujakalu ngajunyangurlu yapangku Warlpiripaturlu purda nyanyi nginyinginyirla manu kurturdurrurla. Kujanganpa milki yirrarnu Wapirra Kaatu manu nyanungunyangu ngalapi nyanu Jiju. Kapurnalu purda nyanyi tarnngangku manu yimi ngarrirni Jilpirliwana.*

> Thinking about him I am telling this about Jakamarra, the one buried at Jilpirli. We buried him at Jilpirli, our sacred place. I called him friend and father. He took care of my old people. He would take them hunting and camping. Because of that I think of him in my mind. My Warlpiri langugae he started to speak and to put on paper. He would have put God's word on paper in my language. I will always remember how really good Jakamarra was. My Warlpiri people remember him in their minds and hearts. He showed us Father God and his son Jesus. We will always remember him and talk about the one buried at Jilpirli.

Stephen M. Swartz
Volume Editor

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A TENTATIVE DESCRIPTION OF NGARDILPA (WARLPIRI) VERBS

Lothar H. Jagst

[*Editor's note: This paper, found posthumously, had not been completed by the author.*]

0. INTRODUCTION

Ngardilpa is spoken by members of the Warnayaka tribe, a sub-tribe of the Warlpiri desert tribe.

The data for this paper was taken from texts collected during late 1970 and early 1971 at Hooker Creek, a settlement in the Northern Territory of Australia.

Jerry and Paddy Jangala along with Tony Japaljarri and Tommy Granite assisted in the collection and transcription of the texts. During various stages of the analysis Victor Jupurrula and Paddy Japangardi helped in the checking of some of the language examples cited in this paper.

Much use was also made of the computer concordance of texts that had been submitted to and processed by the Merrick Computing Center, University of Oklahoma, Norman, Oklahoma under a joint project of the Summer Institute of Linguistics and the University of Oklahoma Research Institute. This project was partially supported by the National Science Foundation.

Thanks is due to Dr Kenneth Hale of M.I.T. for freely supplying what he had collected and written up on Warlpiri. Material presented in those papers proved valuable for comparisons and ideas.

This tentative description of Ngardilpa verbs is the result of analysis carried out during a ten week workshop conducted by Dr Charles Peck at the SIL-AAB centre in Darwin, between March 2 and May 11 1972.

As the title of this paper states, this is by no means a definite description of Ngardilpa verbs. Exactly how the various notions of transitive, intransitive and middle function, and are manifested in the many possible combinations is not yet fully understood. Nor is there any mention of nominalization for the same reason. Passivization in Ngardilpa is manifested in more ways than shown in this paper, but they.require constructions that go behond those possible with verbs alone.

Abbreviations used in the paper are as follows:

ben	benefactive
con	connective
dir	directional
dsf	dative short form
ints	intensifier
locn	locative noun
locnl	locational
locv	locative
man	manner
obn	objective noun
obsf	object short form
qm	query marker
rec	reciprocal
refl	reflexive
ssf	subject short form
t	tense conjugation
ta	tense aspect marker
vcom	verb compounder
vi	intransitive verb stem
vs	verb stative
vt	transitive verb stem

1. VERB TRANSITIVE

In Ngardilpa there are five conjugations of verbs, each inflecting with a distinct set of suffixes. Some of these suffixes are homophonous, but no one set matches another completely, not even when free variation occurs with some suffixes between different sets.

The majority of verbs comprising conjugations 11,111 and 1V are transitive; just a very limited number from each of the three 'transitive conjugations' may also be intransitive, and fewer still are neither, but middle instead.

The verb stems of conjugation 11 are all polysyllabic, that is, disyllabic or longer, and may combine with compounders to form complex or compound verbs, all of which are transitive. There are only a few conjugation 11 non-complex verb stems that are exclusively intransitive, and there is one that is middle, while another one is both transitive and intransitive.

Verb stems belonging to conjugation 111 are monosyllabic and typically transitive, and a few become intransitive only after compounding. These originally transitive stems of such compound intransitive verbs have either lost or significantly altered their meaning, thus permitting them to become intransitive.

Conjugation 1V comprises only one verb stem; it is monosyllabic but combines with various compounders to form complex verbs all of which, with the exception of one, are transitive. In the single complex verb that is intransitive, the original monosyllabic stem has altogether lost its meaning.

1.1 TRANSITIVE DECLARATIVE WITHOUT LOCATIVE

The transitive verb in Ngardilpa can combine in several ordered ways with various affixes to form a complete idea or thought which in English would be a phrase, clause, or even sentence. Ngardilpa speakers also have the choice of not affixing the given affixes to the verb but onto other components that happen to be needed to convey a given thought. A marked tendency to communicate by making only the bare minimum of information explicit has been observed. This could be due to the prevalent practice of using much gesturing, 'finger talk', and pantomime while talking. Another factor could be that much of the implicit information is usually already general knowledge or can be inferred from the surrounding circumstances. Warnayakas also firmly believe that when someone doesn't understand something that has been said, then let him use his mouth and ask, and implicit information is then usually made explicit to him.

Bidimensional arrays, explanations, rules, examples and illustrations are given next in an effort to convey some of the range of choice Ngardilpa speakers have in the use of the transitive verb.

CHART 1

BIDIMENSIONAL ARRAY OF VERB TRANSITIVE DECLARATIVE (VERSION 1)

± con	± vcom	+ vt	+ t	± man 1	+ ta
ngula 'then' *manu* 'and' *kala* 'and' *ngaka* 'later'	reduplicated or single compounders modifiers (reduplicated compounders at times mean repeated action)	transitive verb stems mainly from conjugations 11,111 & 1V but some from 1 & 1V as well (see list of t verbs)	matching suffixes from the five conjugations See Matrix 1	*-rra* 'hither' *-rni/-rnu* 'thither' *-lku/-lki* 'now' *-kirli* 'still' 'motionless' 'only one' 'unique' *-warnu* 'through, over, across' (If need be, 2 of the above may co-occur but the order, if any, is not established)	See Matrix 2

+ ssf	± refx	+ obsf	± ben	± man 2	± ints
See Matrix 3	See Matrix 4	See Matrix 5	*-ki/-ku* this marker is usually omitted or attached to the noun or pronoun denoting the beneficiary and this noun or pronoun stands alone within the sentence or clause	*-marda* 'maybe' 'perhaps' *-wiyi* 'first' 'initially' *warru* 'around, in a circle' *yarda* 'again, but more than 3 times' *yijala* 'again, but just 2 or 3 times' *pina* 'back, return' (If need be 2 of the above may co-occur but it isn't yet established in which order, if any)	*-wu/-yawu* (when affixed to syllable ending with */a/*, then *-wu;* when syllable ends with */i/*, then *-yawa;* when syllable ends with */u/*, then *-wu* but */u/* of syllable to which affixed then changes to */a/*)

REPRESENTATIVE LIST OF TRANSITIVE VERB STEMS

(including some exceptions from 'intransitive' conjugations)

Conjugation 1	*purra-*	'cook, burn'
	karla-	'dig up'
	yilya-	'send'
	tirlpi-	'flake by percussion'
	nyurla-	'knead'
	tulka-	'pinch'
	janka-	'burn' (with inanimate subject)
Conjugation 11	*paka-*	'hit'
	paji-	'cut'
	kiji-	'throw'
	janti-	'scrape'
	yurrpa-	'grind'
	nganti-	'build'
	warrka-	'ride'
	luwa-	'hit with missile, shoot'
	panti-	'spear'
	yirra-	'put'
	mapa-	'rub'
	kati-	'press or weigh down, step on'
	marda-	'hold, have'

Conjugation 111	*ka-*	'carry'
	nya-	'see'
	mapa-	'rub'
	pu-	'hit, bite, damage, kill'
	yu-	'give'
	yulparra-	'send'
Conjugation 1V	*nga-*	'eat, drink'
Conjugation V	*ma-*	'get, take, fetch'
	ma-	'cause to become' (this root must always be preceded by a compounder)

MATRIX 1

Tense Suffixes

Tense	Conjugation 1	Conjugation 11	Conjugation 111	Conjugation 1V	Conjugation V
Non-Past	*-mi/zero**	*-rni*	*-nyi*	*-rni*	*-ni*
Past	*-ja*	*-rnu*	*-ngu*	*-rnu*	*-nu*
Present Continuous	*-nya*	*-rninya*	*-nanya*	*-rninya*	*-nanya*
Future	*-ju*	*-ku*	*-ngku*	*-lku*	*-nku*
Irrealis or Conditional	*-yarla*	*-karla*	*-ngkarla*	*-njarla*	*-ntarla*

* may be zero only in string final position

MATRIX 2

Tense Aspect Suffixes and Forms

(Monosyllabic tense aspects are labelled suffixes because they cannot stand alone no occur verb-initial, whereas polysyllabic tense aspects may stand alone or occur verb-initial, and are thus labelled forms.)

The tense aspect suffixes and forms can only co-occur with certain tense suffixes as indicated in the matrix.

Meaning of Tense Aspect Suffixes and Forms	Tense of Co-occurring Tense Suffix or Form				
	Non-Past	Past	Irrealis or Conditional	Present Continuous	Future
Indef. pres. or Fut.	Zero				
Does not effect meaning of Tense Suffix				Zero	Zero
Definite Past		Zero			
Present Progressive	*-ka*				
Past Imperfective		*-lpa*	*-lpa*		
Immed. Future	*kapi*		*kapi*		
Distant Future	*kapu*		*kapu*		
Negative Future	*kula*				
Definite Negative Past		*kula*			
Negative Present	*kulaka*				
Negative Past Imperfect		*kulalpa*			
Relative Past		*kuja*			
Relative Present	*kujaka*				
Rel. Past Imperfective			*kujalipa*		
Rel. Future, or 'if', 'when'	*kaji*				
?	*kajika*				
?			*kajilpa*		
(is not yet even)?	*kukuka*				

MATRIX 3

Subject Short Forms

Person	Singular	Dual	Plural
First	*-rna*	*-rli* (incl) *-rlijarra* (excl)	*-rlipa* (incl) *-rnalu* (excl)
Second	*-npa*	*-npala*	*-nkulu*
Third	*-zero*	*-pala*	*-lu*

MATRIX 4

Reflexive Forms

Person	Singular	Dual	Plural
First	*-ju*	*-nyanu* (incl) *-nyanu* (excl)	*-nyanu* (incl) *-nyanu* (excl)
Second	*-nyanu*	*-nyanu*	*-nyanu*
Third	*-nyanu*	*-nyanu*	*-nyanu*

Note: The Reciprocal Form is *-nyanu* and supplies only when the subject is plural.

MATRIX 5

Object Short Forms

Person	Singular	Dual	Plural
First	*-ju*	*-ngali* (incl) *-jarrangku* (excl)	*-ngalpa* (incl) *-nganpa* (excl)
Second	*-ngku*	*-ngkupala*	*-nyarra*
Third	-Zero	*-palangu*	*-juna*

MATRIX 6

Dative Short Forms

(Same as object short forms except third person singular is *-rla.*)

Examples of Verb Transitive Declarative Conforming to Bidimensional Array Chart 1

1.	vcom	vt	t	man1	ta
	muku-	*panti*	*-rni*	*-warnu*	*-ka*
	thoroughly	conjugation 11	non-past	through	pres progress.
		spear			

ssf	obsf	man2	ints	
rnalu	*-jana*	*-wiyi*	*-yawu*	
1st pl	3rd pl	first	intensifier	
excl	obj			
subj				

Mukupantirniwarnukarnalujanawiyiyawu
We (but not you) most certainly are first thoroughly spearing them through.

2.	vcom	vt	t	ta	ssf
	turnu-	*ma*	*-nu*	*-lpa*	zero
	gather	conjugation V	past	past	3rd sing subj
		pick up		imperf	

obsf	man2	man2		
-jana	*warru -*	*yijala*		
3rd pl	around	again for		
obj		the 2nd or 3rd time		

Turnumanulpajanawarruyijala.
He was gathering them around again for the second or third time.

3.	vcom	vt	t	man1	ta
	wilypi	*ma*	*-nu*	*-rra*	*-lpa*
	pull	conjugation V	past	away	past imperf
		get, take, fetch			

ssf	obsf	man2	ints	
-pala	zero	*yarda*	*-wu*	
3rd dual	3rd sing	again,	intensifier	
subj	obj	more than		
		3 times		

Wilypimanurralpapalayardawu.
Of course the two of them were pulling it away again for the umpteenth time.

4.

vcom	vcom	vt	t	ta
juka-	*juka-*	*yirra*	*-rnu*	zero
poke	poke	conjugation 11 put	past	def past

ssf	refx	obsf	ben/dsf	man2
zero	*-nyanu*	zero	*-rla*	*-wiyi*
3rd sing subj	3rd sing refx	3rd sing obj	3rd sing dat	first

Jukajukayirrarnunyanurlawiyi
Repeatedly he poked it to himself first.

(Note: Some transitive verbs such as put, give, send, throw, carry, and fetch seem to prefer the inclusion of the benefactive, whereas with the other transitive verbs this has not been observed to occur.)

5.

vcom	vcom	vt	t	man1	ta
pin-	*pin-*	*ma*	*-ni*	*-lki*	*-ka*
thin	thin	conjugation V cause to become	non past	now	pres progressive

ssf	obsf
-rna	zero
1st sing subj	3rd sing obj

Pinpinmanilkikarna
I am now making it thinner and thinner.

6.

con	vcom	vcom	vt
ngaka	*pirdi-*	*pirdi-*	*pu*
later	indiscriminate	indiscriminate	conjugation 111 kill

t	man1	ta	ssf	obsf	man2
-ngu	*-rra*	*kula*	*-rnalu*	*-jana*	*yijala*
past	away	def neg past	1st pl excl	3rd pl obj	again 2nd or 3rd time

ints
-wu
intensifier

Ngakapirdipirdipungurrakularnalujanayijalawu.
Later we (without you) did most certainly not go away and kill them indiscriminately over and over and over again for the second or third time.

7.

vt	t	ta	ssf	obsf
nya-	*-ngkarla*	*kapi*	*-rna*	*-ngku*
conjugation 111	irrealis	immed	1st sing	2nd sing
		fut	subj	obj

man2	man2
-marda	*yijala*
perhaps	again,
	2nd or 3rd
	time

Nyangkarlakapirnangkumardayijala.
I should soon see you perhaps again for the second or third time.

8.

vt	t	ta	ssf
yi-	*-nyi*	*kapu*	*-rna*
conjugation 111	non-past	dist fut	1st sing
give			subj

obsf	ben/dsf	man2
zero	*-ngku*	*pina*
3rd sing	2nd sing	back,
	dat	return

Yinyikapurnangkupina.
I will give it back to you after a long time.

9.

con	vt	t	ta	ssf
ngaka	*purra-*	*-ja*	zero	*-rnalu*
later	conjugation 1	past	defin past	1st pl
	cook			excl subj

obsf
zero
3rd sing
obj

Ngakapurrajarnalu.
Later we (but not you nor they) cooked it.

10.

vt	t	man1	ta	ssf
ngarri-	*-rni*	*-lki*	*kulaka*	*-rna*
conjugation 11	non-past	now	neg pres	1st sing
tell				subj

refx	obsf	ben/dsf	ints.
-ju	zero	*-ju*	*-wu*
1st sing	3rd sing	1st sing	intensifier
reflexive	obj	1st sing dat	

Ngarrirnilkikulakarnajujuwu.
I am most certainly not telling it now to myself.

11.

vt	t	man1	ta	ssf
nga-	*-rnu*	*-lku*	*-lpa*	*-rnalu*
conjugation 1V	past	now	past	1st pl
eat, drink			imperfective	excl subj

obsf	man2
-jana	*-wiyi*
3rd pl	first
obj	

Ngarnulkulparnalujanawiyi.
We (but not you nor they) were now eating them first.

12.

vt	t	ta	ssf
yirra-	*-rni*	zero	zero
conjugation 11	non-past	indef	3rd sing
put		pres	subj
		or fut	

obsf	ben/dsf
zero	*-rla*
3rd sing	3rd sing
obj	dative

Yirrarnirla.
He puts (or will put) it to him some time or other.

13.

vt	t	ta	ssf	refx
ma-	*-ni*	zero	zero	*-nyanu*
conjugation V	non-past	indef	3rd sing	3rd sing
get, take		pres or	subj	reflexive
fetch		fut		

obsf	ben/dsf	man2
zero	*-rla*	*pina*
3rd sing	3rd sing	back, return
obj	dative	

Maninyanurlapina.
He gets (or will get) it back for himself some time or other.

14.

vt	t	man1	ta	ssf
yarlki-	*-rni*	*-lki*	*-ka*	*-pala*
conjugation 11	non-past	now	pres	3rd dual
bite			progressive	subj

rec	man2	ints
-nyanu	*yarda*	*-wu*
3rd dual	again,	intensifier
reciprocal	more than	
	3 times	

Yarlkirnilkakapalanyanuyardawu.
The two of them are now most certainly biting one another again for the umpteenth time.

15.

vt	t	ta	ssf	obsf
luwa-	*-rnu*	zero	zero	zero
conjugation 11	past	definite	3rd sing	3rd sing
shoot		past	subj	obj

Luwarnu.
He shot him.

Tense forms comprising two or more syllables are not often found in the constructions conforming to Bidimensional Array Chart 1; however they do occur in such constructions, and examples 6,7,8 and 10 are listed for that reason. Disyllabic or longer tense aspect forms occur more frequently in constructions conforming to Bidimensional Array Chart 2.

Further, it may be noted that in Bidimensional Array Chart 1, only 5 out of 16 possible tagmemes are obligatory and that out of these 5, as many as 3 may have no phonological representation in certain constructions. These constructions are the ones most commonly used in every day communications; this, coupled with the tendency of the Warnayakas not to say more than absolutely necessary, causes a marked scarcity of longer constructions in any given text.

CHART 2

BIDIMENSIONAL ARRAY OF VERB TRANSITIVE DECLARATIVE (VERSION 2)

To derive Version 2 from Version 1 of the bidimensional array for verb transitive declarative, the following permutations, deletions and additions must be performed:

a. ±vcom +vt +t are permuted to ultimate string position

b. ±man 2 is permuted to position preceding ±man1

c. +ta is permuted to position preceding ±man2

d. +obsf is deleted

e. ±obn is added to position following ±con

This then results in the following string, Version 2:

Chart 2

± con	± obn	+ ta	± man2	± man1	+ssf	±refx or rec	±ben	±vcom	+vt	+t

See Chart 1 for exponents of each tagmeme.

Notes and Restrictions:

a. Position ±obn is expounded with nouns or pronouns representing the object of the transitive verb. In constructions with reciprocals, this noun is object noun as well as subject noun. Object nouns may be accompanied by modifiers or quantifiers.

b. When a ta exponent is monosyllabic or zero, then a con or obn exponent must precede it; but when ta exponent is zero and man2 exponent follows, then this man2 exponent may be phonologically string-initial. Also, when both ta and ssf exponents happen to be zero and no con, obn, man2, man1, refx, rec, or ben exponents are used, then vcom or vt exponents may be phonologically string-initial.

Examples of Verb Transitive Declarative
Conforming to Bidimensional Array Chart 2

The following examples are the same as those given to illustrate Bidimensional Array Chart 2, except that they have undergone the required permutations, deletions and additions to make them conformable to Bidimensional Array Chart 2.

1.

obn	ta	man1	man1	ssf
yapa	*-ka*	*-wiyi*	*warnu*	*-rnalu*
people	pres progressive	first	through	1st pl exc. subj

vcom	vt	t	ints
muku-	*panti*	*-rni*	*-yawu*
thoroughly	conjugation 11 spear	non-past	intensifier

Yapakawiyiwarnurnalumukupantirniyawu.
We (but not you or they) are most certainly thoroughly spearing the people through first.

2.

obn	ta	man2	man2	ssf
ngarrka	*-lpa*	*warru*	*yijala*	zero
man	past imperfect	around	again, for the 2nd or 3rd time	subj.

vcom	vt	t
turnu	*ma*	*-nu*
gather	conjugation V pick up	past

Ngarrkalpawarruyijalaturnumanu.
He was gathering the men around again for the second or third time.

3.

obn	ta	man2	man1	ssf
yama	*-lpa*	*yarda*	*-rra*	*-pala*
shade	past imperf	again more than 3 times	away	3rd dual subj

vcom	bt	t	ints
wilypi-	*ma*	*-nu*	*-wu*
pull	conjugation V get, take, fetch	past	intensifier

Yamalpayardarrapalawilypimanuwu.
Of course the two of them were pulling the shade away again for the umpteenth time.

4.

obn	ta	man2	ssf	refx
kurlarda	zero	*-wiyi*	zero	*-nyanu*
spear	def past	first	3rd sing subj	3rd sing refx

ben/dsf	vcom	vcom	vt	t
-rla	*juka*	*juka*	*yirra-*	*-rnu*
3rd sing dative	poke	poke	conjugation 11 put	past

Kurlardawiyinyanurlajukajukayirrarnu.
Repeatedly he poked the spear to himself first.

5.

obn	ta	man1	ssf	vcom
karli	*-ka*	*-lku*	*-rna*	*pin-*
boomerang	pres progressive	now	1st sing subj	thin

vcom	vt	t
pin-	*ma*	*-ni*
thin	conjugation V cause to become	non past

Karlikalkurnapinpinmani.
I am now making the boomerang thinner and thinner.

6.

con	obn	ta	man2	man1
ngaka	*Kurrinji*	*kula*	*yijala*	*-rra*
later	Kurrinji	def neg past	again, 2nd or 3rd time	away

ssf	vcom	vcom	vt
-rnalu	*pirdi-*	*pirdi-*	*pu*
1st pl excl	indiscrim	indiscrim	conjugation 111 kill

t	ints
-ngu	*-wu*
past	intensifier

Ngakakurrinjikulayijalarrarnalupirdipirdipunguwu.
Later we (without you nor them) did most certainly not go away and kill the Kurrinjis indiscriminately over and over again for the second or third time.

7.

obn	ta	man2	man2	ssf
nyuntu	*kapi*	*-marda*	*yijala*	*-rna*
2nd pers sing pronoun you	immed future	perhaps	again 2nd or 3rd time	1st sing subj

vt	t
nya	*-ngkarla*
conjugation 111	irrealis
see	

Nyuntukapimardayijalarnanyangkarla.
I should soon see you perhaps again for the second or third time.

8.

ta	man2	ssf	ben/dsf	vt
kapu	*pina*	*-rna*	*-ngku*	*yi*
dist fut	back, return	1st sing subj	2nd sing dative	conjugation 111

t
-nyi
non-past

Kapupinarnangkuyinyi.

I will give it back to you after a long time.

9.

con	obn	ta	ssf	vt
ngaka	*kuyu*	zero	*-rnalu*	*purra*
later	meat	defin past	1st pl excl subj	conjugation 1 cook

t
-ja
past

Ngakakuyurnalupurraja
Later we (but not you nor they) cooked the meat.

10.

ta	man1	ssf	refx	ben/dsf
kulaka	*-lku*	*-rna*	*-ju*	*-ju*
neg pres	now	1st sing subj	1st sing reflexive	1st sing dative

vt	t	ints.
ngarri	*-rni*	*-yawu*
conjugation 11 tell	non-past	intensifier

Kulakalkurnajujungarrirniyawu.
I am most certainly not telling it now to myself.

11.

obn	ta	man2	man1	ssf
yakajirri	*-lpa*	*-wiyi*	*-lki*	*-rnalu*
bush tomato	past imperfective	first	now	1st pl excl subj

vt	t
nga	*-rnu*
conjugation 1V	past

Yakajirrilpawiyilkirnalungarnu.
We (but not you nor they) were now eating bush tomatoes first.

12.

obn	ta	ssf	ben/dsf
mukarti	zero	zero	*-rla*
hat	indef pres or fut	3rd sing subj	3rd sing dative

vt	t
yirra-	*-rni*
conjugation 11	non-past
put	

Mukartirlayirrarni.
He puts (or will put) it on the hat sometime or other.

Note: Since the 3rd sing dative short form ***-rla*** is homophonous to the locative suffix ***-rla*** and the particular construction above does not absolutely require a phonological representation of the benefactive, and also since the ***-rla*** in the above and similar constructions (i.e. where ***-rla*** immediately follows a noun) is invariably taken to the the locative, it is imperative to delete ***-rla*** to retain the meaning of the original example 12. If this is not done, then the above now means: 'He puts (or will put) it in (or on) the hat some time or other', whereas it should mean: 'He puts (or will put) the hat to him some time or other'. And so ***'mukartiyirrarni'*** (with ***-rla*** deleted) is now no longer ambiguous and still carries the meaning of the benefactive by virtue of the verb stem *'yirra'*, which along with a few others has this requirement or accompanying sense of benefactive 'built in'.

Mukartiyirrarni.
He puts (or will put) the hat to him some time or other.

13.

obn	ta	man2	ssf	refx
yurlpa	zero	*pina*	zero	*-nyanu*
red ochre	indef pres or fut	back, return	3rd sing subj	3rd sing reflexive

ben/dsf	vt	t
-rla	*ma*	*-ni*
3rd sing dative	conjugation V get, take, fetch	non-past

Yurlpapinanyanurlamani.
He gets (or will get) the red ochre back for himself some time or other.

14.

obn	quan	ta	man2	man1
maliki	*-jarra*	*-ka*	*yarda*	*-lku*
dog	two	pres progressive	again, more than 3 times	now

ssf	rec	vt	t	ints
-pala	*-nyanu*	*yarlki*	*-rni*	*-yawu*
3rd dual subject	3rd dual reciprocal	conjugation 11 bite	non-past	intensifier

Malikijarrakayardalkupalanyanuyarlkirniyawu.
The two dogs are now most certainly biting one another again for the umpteenth time.

15.

obn	ta	ssf	vt	t
nantuwu	zero	zero	*luwa*	*-rnu*
horse	def past	3rd sing subj	conjugation 11 shoot	past

Nantuwuluwarnu.
He shot the horse.

1.2 TRANSITIVE DECLARATIVE WITH LOCATIVE

In the preceding sections two versions of bidimensional arrays for the transitive declarative verb less locative were presented. However, with the locative only one version has been found to occur. Alternate ways of incorporating the locative have been observed, but they occur on levels higher than the level under discussion here. The single version with the locative is essentially the same as Bidimensional Array Chart 1, with the locational and locative put in position following ± con as shown in Chart 3.

CHART 3

BIDIMENSIONAL ARRAY OF VERB TRANSITIVE DECLARATIVE WITH LOCATIVE

± con	dir	± locnl locn	± locv	± vcom	+ut	+t	± man1	+ta	+ssf	± refl or rec	+ obsf	± ben dsf ben	± man2	± ints
ngula 'then'	*kanunju* 'under'	pronouns or nouns with or without pronouns	*-rla/-ngka* 'on, at, in, by'											
kala 'and'	*kanunjumparra* 'underneath'	*nyampu* 'here'	*-kurra/-kirra* 'toward'											
manu 'and'	*kankarlarni* 'on top of, up'	*yalumpu* 'over there'	*-ngurlu/* *-ngirli* 'from'											
ngaka 'later'	*wurnturu* 'far'	*yali* 'yonder, farther than over there'	*-warnu* 'through, across'											
	kaninjarni 'inside'	*yinya* 'that way, out of sight, way out there'												
	yitirli 'outside'													
	yatijarra 'north'													
	kurlirra 'south'													
	kakarrara 'east'													
	karlarra 'west'													
	kamparru 'in front'													
	kulkurru 'in the middle, half-way'													

Exponents same as for Chart 1

Notes to Chart 3:

a. The exponent *-warnu* happens to occur in the locative as well as in the manner1 slot, but only one *-warnu* may be manifested in any given string.

b. The locative is obligatory and must be preceded by at least one locational and may not occur string-initially.

c. The locative *-rla* is affixed to all direction forms and to *nyampu, yali* and *yinya* as well as to all location nouns comprising three or more syllables, or location nouns or names borrowed from a language other than Ngardilpa. The allomorph *-ngka* is affixed to all the forms and location nouns not included in the preceding statement.

The remaining locative suffixes and their allomorphs except *-warnu* are governed by vowel harmony.

d. The suffix *-lumpayi* 'far' may be affixed to any of the four direction exponents *yatijarra* 'north', *kulirra* 'south', *kakarrara* 'east', and *kurlarra* 'west', but before affixation the last syllable is dropped and regressive vowel harmonization occurs where applicable as in

kulirra + -lumpayi = kurlulumpayi 'far (to the) south'.

e. It may be argued that there should be a word break between locative and verb compounder, and indeed short pauses for breath or thinking have been found to occasionally occur there. But identical pauses have also been found to occur along other places in the utterance and usually when such pauses, hesitation or stuttering occurs inadvertently, the speaker promptly repeats the whole utterance in one breath as if to correct himself. As mentioned earlier, alternate ways of incorporating the locative have been observed, but these occurred on levels higher than the level represented by Chart 3, and in these higher levels pauses or word breaks play an imortant role. (Also see note d. under Chart 6.)

Examples of Verb Transitive Declarative with Locative Conforming to Bidimensional Array Chart 3

Again, the following examples correspond to those given to illustrate Bidimensional Array Chart 1. Here and there some of the optional exponents will be omitted for sake of variation and brevity.

1.

locnl		locv	vt	t
dir	locn			
yitirli	*walya*	*-ngka*	*panti*	*-rni*
outside	ground	on	conjugation 11 spear	non-past

ta	ssf	obsf
-ka	*-rnalu*	*-nyanu*
pres progressive	1st pl excl subj	3rd pl obj

Yitirliwalyangkapantirnikarnalunyanu.
Outside on the ground we (but not you nor they) are spearing them.

2.

locnl	locv	vcom	vt	t	ta
locn					
nyampu	*-rla*	*turnu*	*ma*	*-nu*	*-lpa*
here	at	gather	conjugation V pick up	past	past imperfec.

ssf	obsf	man2
zero	*-jana*	*-warru*
3rd sing subj	3rd pl obj	around

Nyampurlaturnumanulpajanawarru.
Here (at) he was gathering them around.

3.

locnl	locv	vcom	vt	t	man1
locn					
ngurra	*-kurra*	*wilypi*	*ma*	*-nu*	*-rra*
camp	towards	pull	conjugation V get, take, fetch	past	away

ta	ssf	obsf
-lpa	*-pala*	zero
past imperfect	3rd dual subj	3rd sing obj

Ngurrakurrawilypimanurralpapala.
Toward the camp the two of them were pulling it away.

4.

locnl		locv	vcom	vcom	vt
dir	locn				
kaninjarni	*yuwarli*	*-rla*	*juka-*	*juka-*	*yirra-*
inside	house	in	poke	poke	conjugation 11 put

t	ta	ssf	refx	obsf	ben
-rnu	zero	zero	*-nyanu*	zero	*dsf*
past	def past	3rd sing	3rd sing	3rd sing	*-rla*
		subj	refx	obj	3rd sing dative

Kaninjarniyuwarlirlajukajukayirrarnunyanurla.
Inside in the house he repeadedly poked it to himself.

5.

locnl	locv	vcom	vcom	vt	t
locn					
nyampu	*-ngurlu*	*pin-*	*pin-*	*ma*	*-ni*
here	from	thin	thin	conjugation V cause to become	non-past

ta	ssf	obsf
-ka	*-rna*	zero
pres progressive	1st sing subj	3rd sing obj

Nyampungurlupinpinmanikarna
From here (at) I am making it thinner and thinner.

6.

locnl		locv	vt	t	ta
dir	locn				
kankarlarni	*pirli*	*-ngka*	*pu*	*-ngu*	*kula*
on top of, up	hill	on	conjugation 111 kill	past	def neg past

ssf	obsf
-rnalu	*-jana*
1st pl excl	3rd pl obj

Kankarlarnipirlingkapungukularnalujana.
We (without you nor them) did not kill them up on top of the hill.

7.

locnl	locv	vt	t	ta
locn				
ngurra	*-ngka*	*nya*	*-ngkarla*	*kapi*
camp	in	conjugation 111 see	irrealis	immed fut

ssf	obsf
-rna	*-ngku*
1st sing subj	2nd sing obj

Ngurrangkanyangkarlakapirnangku.
I should soon see you in the camp.

8.

locnl	locv	vt	t	ta
locn				
yinya	*-rla*	*yi*	*-nyi*	*kapu*
that way	at	conjugation 111	non-past	dist
out of sight,		give		fut
way out there				

ssf	obsf	ben	man2
		dsf	
-rna	zero	*-ngku*	*pina*
1st sing	3rd sing	2nd sing	back, return
subj	obj	dat	

Yinyarlayinyikapurnangkupina.
After a long time I will give it back to you way out there (at).

9.

con	locnl	locv	vt	t	ta
	locn				
ngaka	*warlu*	*-ngka*	*purra*	*-ja*	zero
later	fire	in	conjugation 1	past	def past
			cook		

ssf	obsf
-rnalu	zero
1st pl	1st sing
excl subj	obj

Ngakawarlungkapurrajarnalu.
Later we (but not you nor they) cooked it in the fire.

10.

locnl	locv	vt	t	ta
locn				
nyampu	*-rla*	*ngarri-*	*-rni*	*kulaka*
here	at	conjugation 11	non-past	neg pres
		tell		

ssf	refx	obsf	ben
			dsf
-rna	*-ju*		*-ju*
1st sing	1st sing	3rd sing	1st sing
subj	refx	obj	dat

Nyampurlangarrirnikulakarnajuju.
I am not telling it to myself here (at).

11.

locnl	locv	vt	t	ta
locn				
yama	*-ngka*	*nga*	*-rnu*	*-lpa*
shade	in	conjugation 1V	past	past
		eat, drink		imperfective

ssf	obsf
-rnalu	*-jana*
1st pl	3rd pl
excl	obj
subj	

Yamangkangarnulparnalujana.
We (but not you nor they) were eating them in the shade.

12.

locnl		locv	vt	t
dir	locn			
yatijarra	*yali*	*-rla*	*yirra*	*-rni*
north	yonder	at, in	conjugation 11	non-past
			put	

ta	ssf	obsf	ben
			dsf
zero	zero	zero	*-rla*
indef	3rd sing	3rd sing	3rd sing
pres or	subj	obj	dat
fut			

Yatijarrayalirlayirrarnirla.
Over yonder in the north he puts (or will put) it to him sometime or other.

13.

locnl		locv	vt	t
dir	locn			
wurnturu	*yinya*	*-rla*	*ma*	*-ni*
far	that way	at	conjugation V	non-past
	out of sight		get, take, fetch	

ta	ssf	obsf
zero	zero	zero
indef.	3rd sing	3rd sing
pres or	subj	obj
future		

Wurnturuyinyarlamani.
Far that way out of sight he vets (or will get) it at some time or other.

14.	locnl	locn	vt	t	ta
	locn				
	karru	*-ngka*	*yarlki*	*-rni*	*-ka*
	creek	by	conjugation 11 bite	non-past	pres progress

ssf	rec
-pala	*-nyanu*
3rd dual	3rd dual
subj	reciprocal

Karrungkayarlkirnikapalanyanu.
By the creek the two of them are biting one another.

15.	locnl	locv	vt	t	ta
	locn				
	nyampu	*-rla*	*luwa*	*-rnu*	zero
	here	at	conjugation 11 shoot	past	def past

ssf	obsf
zero	zero
3rd sing	3rd sing
subj	obj

Nyampurlaluwarnu.
Here (at) he shot him.

2. VERB TRANSITIVE

Among the five conjugations of Ngardilpa verbs, conjugations 1 and V comprise the bulk of intransitive verb stems. The few transitive verb stems belonging to these two 'intransitive' conjugations have already been elaborated on in section 1.1.

Conjugation 1 comprises more verb stems than any of the other conjugations and these stems are all polysyllabic, that is, disyllabic or longer, and combine with many compounders to form complex or compound verbs, which are all intransitive.

Conjugation V has very few verb stems and they are all monosyllabic, but they may combine with different compounders to form many complex or compound verbs, which again are intransitive except for those enumerated in section 1.1.

2.1 INTRANSITIVE DECLARATIVE WITHOUT LOCATIVE

CHART 4

BIDIMENSIONAL ARRAY OF VERB INTRANSITIVE DECLARATIVE (VERSION 1)

±con	±vcom	+vi	+t	±man1	+ta	+ssf	±man2	±ints
Exponents same as for Chart 1								

Note that to derive the above string from that given in Chart 1, only ±refx or rec, +obsf and ±ben have been deleted, and +vt changed to +vi.

Representative List of Intransitive Verb Stems
(including some exceptions from transitive conjugations)

Conjugation 1	*wangka*	'speak, talk'
	purla	'shout'
	yula	'cry'
	ngarlarri	'laugh'
	wirnpirli	'whistle'
	nyina	'sit'
	nguna	'lie (down)'
	karri	'stand'
	yuka	'enter'
	jarri	'become'
	pali	'die'
	wanti	'fall'
	parnka	'run'
	karli-	'flow'
	pardi-	'arise, emerge'
	karrka	'proceed, go'
	wapa	'walk'
	yarnka	'commence to go'
	parntarri	'crouch'
	janka	'burn'

Among the above verb stems *jarri* 'become' must always be preceded by either a verb compounder, subject short form, or interrogative marker.

Conjugation 11	*mati*	'go one behind the other'
	warrka	'climb'
Conjugation 111	*pirrmarnpu*	'bounce, rebound'
	juwulypu	'jump'
Conjugation 1V	*karalyarrnga*	'slide, slip'
Conjugation V	*ya*	'go'
	wurulya	'hide'
	murnturrma	'roar'
	walykurrma	'bark'
	kilywirrma	'make squeaking sound'
	taalma	'make clicking sound'

Examples of Verb Intransitive Declarative Conforming to Bidimensional Array Chart 4

1.

con	vcom	vcom	vi	t
ngula	*jingi-*	*jingi-*	*ya*	*-nu*
then	smartly	smartly	conjugation V	past
	progress	progress	go	
	through	through		

man1	ta	ssf	man2
-rnu	zero	zero	*pina*
hither	def past	3rd sing	back
		subj	return

Ngulajingijingiyanurnupina.
Then he quickly and smartly came through on his way back.

2.

con	vi	t	man1	ta
ngaka	*parnka*	*-ja*	*-rni*	zero
later	conjugation 1	past	hither	def past
	run			

ssf	man2
zero	*yijala*
3rd sing	again,
subj	2nd or 3rd
	time

Ngakaparnkajarniyijala.
Later he came running again for the second or third time.

3.

con	vcom	vi	t	ta	ssf	ints.
kala	*muku-jarda*	*wanti*	*-ja*	zero	*-lu*	*-wu*
and	total sleep	conjugation 1 fall	past	def past	3rd pl subj	intensifier

Kalamukujardawantijaluwu.
And they definitely fell totally asleep. (Died instantly without knowing what happened)

4.

vcom	vi	t	ta	ssf
yakarra	*pardi*	*-ja*	zero	*-rnalu*
awake	conjugation 1 rise	past	def past	1st pl excl subj

Yakarrapardijarnalu.
We (but not you nor they) awoke and got up.

5.

con	vcom	vi	t	man1	ta	ssf	man2
ngula	*yirrkinypa*	*ya*	*-nu*	*-lku*	*kula*	*-nkulu*	*pina*
then, afterwards, next	together, in a group	conjugation V go	past	now	def neg past	2nd pl subj	back return

Ngulayirrkinypayanulkukulankulupina.
Afterwards you all did not now go back together (in a group).

6.

con	vcom	vi	t	ta	ssf
kala	*kurnta-*	*jarri*	zero	*kukuka*	zero
and	ashamed	conjugation 1 become	non-past	not yet even	3rd sing subj

Kalakurntajarrikukuka.
And she is not even becoming ashamed yet.

7.

vcom	vi	t	man1	ta
jupu	*karri*	*-ja*	*-kirli*	zero
stop	conjugation 1 stand	past	motionless	def past

ssf	man2	ints
-rli	*yijala*	*-wu*
1st dual incl	again, 2nd or 3rd time	intensifier

Jupukarrijakirlirliyijalawu.
You and I most certainly came to a stop (and stood motionless) again for the second or third time.

8.

vi	t	man1	ta
wangka	*-mi*	*-rni*	*-ka*
conjugation 1 speak	non-past	hither	pres progress

ssf	man2
-pala	*-wiyi*
3rd dual subj	first

Wangkamirnikapalawiyi.
The two of them are speaking this way (hither) first.

9.

con	vcom	vi	t	man1
kala	*pingka*	*karli*	*-mi*	*-rra*
and	slowly	conjugation 1 flow	non-past	thither

ta	ssf
kula	zero
neg fut	3rd sing subj

Kalapingkakarlimirrakula.
And it will not slowly flow away (thither).

10.

con	vcom	vi	t	man1	ta
ngaka	*murnturr*	*ma*	*-nu*	*warnu*	zero
later	roar	conjugation V make, cause	past	across	def past

ssf	man2
-lu	*yarda*
3rd pl subj	again, more than 3 times

Ngakamurnturrmanuwarnuluyarda.
Later they roared past (across) again for the umpteenth time.

11.	con	vcom	vi	t	man1	man1	ta	ssf	man2
	ngula	*karalyarr*	*nga*	*-lku*	*-lku*	*-rra*	zero	zero	*-marda*
	then	slip, slide	conjugation 1V semantically empty	fut	now	thither	no meaning	3rd sing subj	maybe

Ngulakaralyarrngalkulkurramarda.
Then it will perhaps now slide away (thither).

12.	vi	t	ta	ssf
	mati	*-rni*	zero	*-li*
	conjugation 11 go one behind the other, in single file	non-past	indef pres or fut.	3rd pl subj

Matirnili.
They go (or will go) in single file some time or other.

13.	vcom	vi	t	ta	ssf
	juwuly-	*pu*	*-ngku*	zero	zero
	jump	conjugation 111 hit, but no meaning here	fut	no meaning	3rd sing subj

Juwulypungku.
He will jump.

14.	vcom	vi	t	ta	ssf
	walykurr-	*ma*	*-nu*	zero	zero
	bark	conjugation V make, cause	past	def past	3rd sing subj

Walykurrmanu.
It barked.

15.	vcom	vi	t	ta	ssf
	kulu	*jarri*	zero	zero/*-mi*	zero
	fight	conjugation 1 become	non-past	indef pres or fut	3rd sing sugj

Kulujarri.
He becomes (or will become) angry some time or other.

The comment regarding tense aspect forms following the examples for Chart 1 also applies to this section.

CHART 5

BIDIMENSIONAL ARRAY OF VERB INTRANSITIVE DECLARATIVE (VERSION 2)

±con	+ta	±man2	±man1	+ssf	±vcom	+vi	+t	±ints

Exponents same as for Chart 4

Note that to derive the above string from Chart 4, certain permutations have been applied:

a. ±vcom +vi +t were permuted to position preceding ±ints.

b. ±man 2 was permuted to position preceding ±man1.

c. ±ta was permuted to position following ±con.

Or it can also be said that Chart 5 was derived from Chart 2, via the following deletions and changes:

a. delete ±obn, ±refx and ±ben.
or
rec

b. change +vt to +vi.

Restrictions: When ta exponent is monosyllabic or zero, then a con exponent must precede it; but when ta exponent is zero and a man2 exponent follows, then this man2 exponent may be phonologically string-initial. Also, when both ta and ssf exponents happen to be zero and no con, man2, nor man1 exponents are used, then vcom or vi exponents may be phonologically string-initial.

Examples of Verb Intransitive Declarative Conforming to Bidimensional Array Chart 5

The following examples are the same as those listed for Chart 4, with corresponding numbering, except that the permutations, deletions, changes and restrictions have been applied to make them compatible with Chart 5.

1.

ta	man2	man1	ssf	vcom	vi	t
zero	*pina*	*-rni*	zero	*jingi-*	*ya*	*-nu*
def past	back,return	hither	3rd sing subj	smartly progress through	conjugation V go	past

Pinarnijingiyanu.
He quickly and smartly came through on his way back.

2.

ta	man2	man1	ssf	vi	t
zero	*yijala*	*-rni*	zero	*parnka*	*-ja*
def past	again, 2nd of 3rd time	hither	3rd sing subj	conjugation 1 run	past

Yijalarniparnkaja.
He came running again for the second or third time.

3.

con	ta	ssf	vcom	vi	t	ints
kala	zero	*-lu*	*muku-jarda*	*wanti*	*-ja*	*-wu*
and	def past	3rd pl subj	total sleep	conjugation 1 fall	past	intensifier

Kalalumukujardawantijawu.
And they definitely fell totally asleep. (Died instantly without knowing what happened)

4.

con	ta	ssf	vcom	vi	t
ngaka	zero	*-rnalu*	*yakarra*	*pardi*	*-ja*
later	def past	1st pl excl subj	awake	conjugation 1 rise	past

Ngakarnaluakarrapardija.
Later we (but not you nor they) awoke and got up.

5.

ta	man2	man1	ssf	vcom
kula	*pina*	*-lku*	*-nkulu*	*yirrkinypa*
def neg	back	now	2nd pl	together
past	return		subj	in a group

vi	t
ya	*-nu*
conjugation V	past
go	

Kulapinalkunkuluyirrkinypayanu.
You all did not now go back together (in a group).

6.

ta	ssf	vcom	vi	t
kukuka	zero	*kurnta*	*jarri*	zero
not yet	3rd sing	ashamed	conjugation 1	non-past
even	subj		become	

Kukukakurntajarri.
She is not even becoming ashamed yet.

7.

ta	man2	man1	ssf	vcom
zero	*yijala*	*-kirli*	*-rli*	*jupu*
def past	again, 2nd or 3rd time	motionless	1st dual incl	stop

vi	t	ints
karri	*-ja*	*-wu*
conjugation 1	past	intensifier
stand		

Yijalakirlirlijupukarrijawu.
You and I most certainly came to a stop (and stood motionless) again for the second or third time.

8.

con	ta	man2	man1	ssf
kala	*-ka*	*-wiyi*	*-rni*	*-pala*
and	press progress	first	hither	3rd dual subj

vi	t
wangka	zero/*-mi*
conjugation 1	non-past
speak	

Kalakawiyirnipalawangka.
And the two of them are speaking this way (hither) first.

9.

ta	man1	ssf	vcom	vi
kula	*-rra*	zero	*pingka*	*karli*
neg gut	thither	3rd sing subj	slowly	conjugation 1 flow

t
zero/*-mi*
non-past

Kularrapingkakarlimi.
It will not slowly flow away (thither).

10.

ta	man2	man1	ssf	vcom
zero	*yarda*	*warnu*	*-lu*	*murnturr*
def past	again, more than 3 times	across	3rd pl subj	roar

vi	t
ma	*-nu*
conjugation V make, cause	past

Yardawarnulumurnturrmanu.
They roared past (across) again for the umpteenth time.

11.

ta	man2	man1	man1	ssf	vcom
zero	*-marda*	*-rra*	*-lku*	zero	*karalyarr*
no meaning	maybe	thither	now	3rd sing subj	slip, slide

vi	t
nga	*-lku*
conjugation !V semantically empty	fut

Mardarralkukaralyarrngalku.
It will perhaps now slide away (thither).

12.

con	ta	ssf	vi	t
kala	zero	*-lu*	*mati*	*-rni*
and	indef pres or fut	3rd pl subj	conjugation 11 go one behind the other, in single file	non-past

Kalalumatirni.
And they go (or will go) in single file some time or other.

13.	ta	ssf	vcom	vi	t
	zero	zero	*juwuly*	*pu*	*-ngku*
	no meaning	3rd sing subj	jump	conjugation 111 hit, but no meaning here	fut

Juwulypungku.
He will jump.

14.	ta	ssf	vcom	vi	t
	zero	zero	*walykurr-*	*ma*	*-nu*
	def past	3rd sing subj	bark	conjugation V make, cause	past

Walykurrmanu.
It barked.

15.	ta	ssf	vcom	vi	t
	zero	zero	*kulu*	*jarri*	zero/*-mi*
	indef pres or fut	3rd sing subj	fight	conjugation 1 become	indef pres or fut

Kulujarri.
He becomes (or will become) angry some time or other.

2.2 INTRANSITIVE DECLARATIVE WITH LOCATIVE

The locative has been found to occur only with intransitive verb string version 2 but not with intransitive verb string version 1. Yet the locative occurs with transitive verb string version 1 but not with transitive verb string version 2. This could mean that perhaps the locative does also occur with the intransitive version 1 and the transitive version 2 but did not happen to occur in this way in the collected texts; or it could mean that this is precisely how the locative must join with the intransitive and transitive verbs respectively.

Although there is only one basic version of locative with intransitive verb, certain permutations within this version do occur and these are explained following Chart 6.

CHART 6

BIDIMENSIONAL ARRAY OF LOCATIVE WITH VERB INTRANSITIVE

±con	±locnl dir locn	+locv	+ta	±man2	±man1	+ssf	±vcom	+vi	+t	±ints
Same exponents as in chart 3		Same exponents as in Chart 4								

Notes:
a. Only a connective or locational may occur string-initially.

b. At least one locational must occur in each string.

c. See note c. following Chart 3 concerning the distribution of the location *-rla* and its allomorph *-ngka.*

d. It may be argued that in the above string a work-break should occur between locv and ta. Neither monosyllabic ta nor any ssf exponents may occur word-initially and con must remain utterance-initial, that is, following a pause. Also, ssf is obligatory within a verb string and if there were a break between locv and ta, and ssf had permuted to position preceding locv, then the verb would have lost its obligatory ssf. Therefore the above string as presented in Chart 6 is considered to be one word. (Also see note e. under Chart 3.)

Examples of Verb Intransitive with Locative
Conforming to Bidimensional Array Chart 6 and its possible variations

The following examples have been taken from those following Chart 5, and their numerical sequence has been preserved; only a locative has been added to each.

1.

con	locnl dir	locv	ta	man2	man1
ngaka	*kamparru*	*-rla*	zero	*pina*	*-rni*
later	in front	at	def past	back, return	hither

ssf	vcom	vi	t
zero	*jingi-*	*ya*	*-nu*
3rd sing subj	smartly progress through	conjugation V go	past

Ngakakamparrurlapinarnijingiyanu.
Later at the front he quickly and smartly came through on his way back.

or with permutation 1:

con	locnl dir	man1	man2	ta	locv
ngaka	*kamparru*	*-rni*	*pina*	zero	*-rla*
later	in front	hither	back, return	def past	at

vcom	vi	t
jingi	*ya*	*-nu*
smartly progress through	conjugation V go	past

Ngakakamparrurnipinarlajingiyanu.
Later at the front he quickly and smartly came through on his way back.

or with permutation 2, option 1:

con	locnl dir	locv	ta	man2	man1
ngaka	*kamparru*	*-rla*	zero	*pina*	*-rni*
later	in front	at	def past	back, return	hither

vcom	vi	t	ssf
jingi	*ya*	*-nu*	zero
smartly progress through	conjugation V go	past	3rd sing subj

Ngakakamparrurlapinarnijingiyanu.
Later at the front he quickly and smartly came through on his way back.

or option 2:

con	locnl dir	ssf	locv	ta	man2
ngaka	*kamparru*	zero	*-rla*	zero	*pina*
later	in front	3rd sing subj	at	def past	back, return

man1	vcom	vi	t
-rni	*jingi*	*ya*	*-nu*
hither	smartly progress through	conjugation V go	past

Ngakakamparrurlapinarnijingiyanu.
Later at the front he quickly and smartly came through on his way back.

Notice that 3 or the above 4 versions of example 1 are phonologically itentical because ssf happens to be zero.

2.

con	locnl locn	locv	ta	man2	man1
kala	*nyampu*	*-kurra*	zero	*yijala*	*-rni*
and	here	towards	def past	again, 2nd or 3rd time	hither

ssf	vi	t
zero	*parnka*	*-ja*
3rd sing subj	conjugation 1 run	past

Kalanyampukurrayijalarniparnkaja.
And towards here he came running again for the second or third time.

3.

con	locnl dir	locv	ta	ssf
kala	*kaninjarni*	*-rla*	zero	*-lu*
and	inside	at	def past	3rd pl subj

vcom	vi	t	ints
-jarda	*wanti*	*-ja*	*-wu*
total sleep	conjugation 1 fall	past	intensifier

Kalakaninjarnirlalumukujardawantijawu.
And inside (at) they definitely fell totally asleep. (Died instantly without knowing what happened)

4.

con	locnl locn	locv	ta	ssf
ngaka	*yinya*	*-rla*	zero	*-rnalu*
later	way out there	at	def past	1st pl excl subj

vcom	vi	t
yakarra	*pardi*	*-ja*
awake	conjugation 1 rise	past

Ngakayinyarlarnaluyakarrapardija.
Later way out there (at) we (but not you nor they) awoke and got up.

or with permutation 2, option 1:

con	locnl locn	locv	ta	vcom
ngaka	*yinya*	*-rla*	zero	*yakarra*
later	way out there	at	def past	

vi	t	ssf
pardi	*-ja*	*-rnalu*
conjugation 1 rise	past	1st pl excl subj

Ngakayinyarlayakarrapardijarnalu.
Later way out there (at) we (but not you nor they) awoke and got up.

or option 2:

con	locnl locn	ssf	locv	ta
ngaka	*yinya*	*-rnalu*	*-rla*	zero
later	way out there	1st pl excl subj	at	def past

vcom	vi	t
yakarra	*pardi*	*-ja*
awake	conjugation 1 rise	past

Ngakayinyarnalurlayakarrapardija.
Later way out there (at) we (but not you nor they) awoke and got up.

5.

locnl locn	locv	ta	man2	man1
yali	*-ngirli*	*kula*	*pina*	*-lku*
over there	from	def neg past	back, return	now

ssf	vcom	vi	t
-nkulu	*yirrkinypa*	*ya*	*-nu*
2nd pl subj	together, in a group	conjugation V go	past

Yalingirlikulapinalkunkuluyirrkinypayanu.
You all did not now go back together (in a group) from over there.

or with permutation 1:

locnl locn	man1	man2	ta	locv
yali	*-lki*	*pina*	*kula*	*-ngurlu*
over there	now	back, return	def neg past	from

ssf	vcom	vi	t
-nkulu	*yirrkinypa*	*ya*	*-nu*
2nd pl subj	together, in a group	conjugation V go	past

Yalilkipinakulangurlunkuluyirrkinypayanu.
You all did not now go back together (in a group) from over there.

6.

locnl locn	locv	ta	ssf	vcom
nyampu	*-rla*	*kukuka*	zero	*kurnta*
here	at	not yet even	3rd sing subj	ashamed

vi	t
jarri	zero
conjugation 1 become	non-past

Nyampurlakukukakurntajarri.
She is not even becoming ashamed yet here (at).

7.

locnl locn	locv	ta	man2	man1
pirli	*-ngka*	zero	*yijala*	*kirli*
hill	at	def past	again, 2nd or 3rd time	motionless

ssf	vcom	vi	t	ints
-rli	*jupu*	*karri*	*-ja*	*wu*
1st dual incl	stop	conjugation 1 stand	past	intensifier

Pirlingkayijalakirlirlijupukarrijawu.
You and I most certainly came to a stop (and stood motionless) at the hill again for the second or third time.

8.

con	locnl locn	locv	ta	man2	man1
kala	*yalumpu*	*-ngurlu*	*-ka*	*-wiyi*	*-rni*
and	over there	from	pres progress	first	hither

ssf	vi	t
-pala	*wangka*	zero/*-mi*
3rd dual subj	conjugation 1 speak	non-past

Kalayalumpungurlukawiyirnipalawangka.
And from over there the two of them are speaking this way (hither) first.

9.

locnl dir	locv	ta	man1	ssf
kurlirra	*-kurra*	*kula*	*-rra*	zero
south	towards	neg fut	thither	3rd sing subj

vcom	vi	t
pingka	*karli*	*/-mi*
slowly	conjugation 1 flow	non-past

Kurlirrakurrakularrapingkakarli.
It will not slowly flow away (thither) towards the south.

10.

locnl locn		locv	ta	man2
kirri	*-kari*	*-kirra*		*yarda*
village	other	towards	def past	again, more than 3 times

man1	ssf	vcom	vi	t
-warnu	*lu*	*murnturr*	*ma*	*-nu*
across	3rd pl subj	roar	conjugation V make, cause	past

Kirrikarikirrayardawarnulumurnturrmanu.
They roared past (across) again towards the other village for the umpteenth time.

or with permutation 1:

locnl locn		man1	man2	ta
kirri	*-kari*	*-warnu*	*yarda*	zero
village	other	across	again, more than 3 times	def past

locv	ssf	vcom	vi	t
-kurra	*lu*	*murnturr*	*ma*	*-nu*
towards	3rd pl subj	roar	conjugation V make, cause	past

Kirrikariwarnuyardakurralumurnturrmanu.
They roared past (across) again towards the other village for the umpteenth time.

11.

locnl dir	locv	ta	man2	man1
kanumjumparra	*-kurra*	zero	*-marda*	*-rra*
underneath	towards	no meaning	maybe	thither

man1	ssf	vcom	vi	t
-lku	zero	*karalyarr*	*nga*	*-lku*
now	3rd sing subj	slip, slide	conjugation 1V empty	fut

Kanumjumparrakurramardarralkukaralyarrngalku.
It will perhaps now slide away (thither) towards underneath (there).

12.

locnl dir	locv	ta	ssf	vi
yatijarra	*-kurra*	zero	*-lu*	*mati*
north	towards	indef pres or fut	3rd pl subj	conjugation 11 go one behind the other, in single file

t
-rni
non-past

Yatijarrakurralumatirni.
The go (or will go) in single file towards the north some time or other.

13.

locnl locn	locv	ta	ssf	vcom
karru	*-ngka*	zero	zero	*juwuly*
creek	in	no meaning	3rd sing subj	jump

vi	t
pu	*-ngku*
conjugation III hit, but no meaning here	fut

Karrungkajuwulypungku.
He will jump into the creek.

14.

locnl		locv	ta	ssf
dir	locn			
wurnturu	*yinya*	*-rla*	zero	zero
far	way out there	at	def past	3rd sing subj

vcom	vi	t
walykurr	*ma*	*-nu*
bark	conjugation V make, cause	past

Wurnturuyinyarlawalykurrmanu.
Far away out there (at) it barked.

15.

locnl dir	locv	ta	ssf	vcom
kamparru	*-rla*	zero	zero	*kulu*
in front	at	indef pres or fut	3rd sing subj	fight

vi	t
jarri	zero/*-mi*
conjugation I become	indef pres or fut

Kamparrurlakulujarri.
Up in front (at) he becomes (or will become) angry some time or other.

3. VERB MIDDLE

Some verbs in Ngardilpa are neither transitive or intransitive and so for lack of a better term they are here called 'middle verbs'. As demonstrated in the preceding sections, the transitive verb requires an object represented either by a noun or the object short form, and the intransitive verb requires no object. This is one of the features that distinguishes transitive verbs from intransitive ones. The feature that distinguishes the middle verb from either of the other verbs is that middle verbs require an object but this object is exclusively represented by the dative short form. Some intransitive verbs function also as middle verbs, but then they always require the dative short form.

In the collected texts, these middle verbs are not too numerous and further specific eliciting was not possible due to the time limitations imposed on the workshop; therefore no bidimensional arrays for middle verbs will be charted. Also it has been observed that some constructions denoting the jussive mood are homophonous to some middle verb constructions and so the jussives will not be elaborated on either.

The few middle verbs that have been found among the various conjugations to date are listed below:

Conjugation 1

wangka	'speak to, talk to, tell to'
pura	'follow someone or something'

Conjugation 11

parda-	'wait for someone or something'
ngarri-	'tell to'

Conjugation 111

purdanya	'listen to, think about, remember'
wurruka	'sneak up to'

Conjugation V

walkurrji	'bark at'
warungkama	'forget'

4. VERB STATIVE

Stative verbs play an important role in Ngardilpa and are used frequently in everyday speech.

In general, English adjectives coupled with the verb 'to be' translate into stative verbs in Ngardilpa. Some statives translate into English nouns coupled with the verb 'to be'. These nouns are predominantly kinship terms.

Stative verbs in Ngardilpa are not inflected for tense, not tense-aspect, but they do take at least one manner exponent.

Some of the modifiers or adjectives used in Ngardilpa to form stative verbs:

lawa	'no, nothing, not'
mata	'tired'
palka	'present, bodily form'
wiri	'big'
ngurrpa	'uninformed, ignorant'
wuukayi	'exhausted'
nyurnu	'sick, not well'
walyka	'cold'
pampa	'blind'
jilki	'deaf'
murrumurru	'sick, in pain, hurting'
ngurrju	'good'
yarnma	'thin'
rampaku	'weak'
wangamarra	'crazy'
maju	'bad'
jama	'generous'
yakiri	'wet'
wanka	'alive, raw'
lani	'frightened'
kari	'other'
pina	'back. return'

CHART 7

BIDIMENSIONAL ARRAY OF VERB STATIVE

+vs	±man	+ssf
modifiers, kinship terms, limited number of certain applicable nouns	*-lku/-lku* now	see Matrix 3 in Section 1.1

Examples of Verb Stative

1.

vs	ssf
lawa	*-rna*
not	1st sing subj

Lawarna.
I am not here or present. (or 'I am not or did not do it', depending on the situation or context)

2.

vs	man	ssf
wiri	*-lki*	zero
big	now	3rd sing subj

Wirilki.
He is big now. (He is an adult or man now.)

3.

vs	man	ssf
ngarrka	*-lku*	*-na*
man	now	1st sing subj

Ngarrkalkurna.
I am a man now. (I am grown-up now, because I have been initiated or circumcised.)

4.

vs	ssf
wuukayi	*-npa*
exhaused	2nd sing subj

Wuukayinpa.
You are exhaused.

5.

vs	ssf
kalinyanu	*-rnalu*
wife	1st pl excl

Kalinyanurnalu.
We (but not you nor they) are wives.

6.

vs	ssf
Japangardi	*-rna*
name of males belonging to that particular skin group	1st sing subj

Japangardirna.
I am (a) Japangardi.

7.

vs	man	ssf
palka	*-lku*	*-rna*
present	now	1st sing subj

Palkalkurna.
I am present (here) now.

Note: The above intransitive example preceded or followed by an appropriate object noun becomes then transitive with a corresponding shift in the meaning of the stative verb:

8.

obn	vs	man	ssf
ngapa	*palka*	*-lku*	*-rna*
water	find	now	1st sing subj

Ngapa palkalkurna.
I am finding (or found) water now.

9.

vs	ssf
kari	*-pala*
other	3rd dual subj

Karipala.
The two of them are the other ones.

Although these stative verbs are not actually inflected for tense, an attempt at specifying when the action is occurring is evident by the use of the lone manner exponent *-lku/-lku* 'now'. There is another way of indicating when the action took place, that is, by placing a time adverb either before or after the stative verb:

10.

adv	vs	ssf
Nyurruwiyi	*lani*	*-rlijarra*
long time ago	frightened	1st dual excl.

Nyurruwiyilanirlijarra.
Long time ago we two (but not you nor they) were frightened.

11.

vs	ssf	adv
murrumurru	*-rna*	*purrarni*
sick	1st sing subj	yesterday

Murrumurrura purrarni.
I was sick yesterday.

12.

adv	vs	ssf
jukurrapardukari	*pina*	*-nkulu*
day after tomorrow	return	2nd pl subj

Jukurrapardukari pinankulu.
You all will return the day after tomorrow.

(This is ambiguous because it does not specify whether they will come back or go back, but the situation or context, or perhaps other implicit information accompanying the above utterance, usually removed such ambiguity.)

5. QUERY

In Ngardilpa there exists a clear distinction between queries and interrogatives. An overt marker divides the queries from the interrogatives and although both have the easily recognizable rising intonation, the queries demand or expect either a 'yes' or 'no' answer.

This overt query marker is obligatory, yet on a few rare occasions it was found to have been omitted. On those occasions intonation seemed to be even more pronounced and noticeable.

The query marker combines in a predictable way with the various verbs, and an obvious feature of the query is the marked lack of optional tagmemes in any given string. This might mirror the urgency and impatience which usually accompanies queries; in other words, the inquirer wants to hear an answer as soon as possible and he therefore has no time to think about and insert into his query all kinds of morpheme bits representing exponents of optional tagmemes.

5.1 QUERY WITH VERB TRANSITIVE

Charts 1 and 2 comprise the two versions of verb transitive declarative, and the query with verb transitive also conforms to these two versions. The only difference is the addition of the query marker and the omission of most of the optional tagmemes, and the choice of either one of only two optional manl exponents in position following +t.

CHART 8

BIDIMENSIONAL ARRAY OF QUERY WITH VERB TRANSITIVE (Version 1)

±vcom	+vt	+t	±manl	+qm	+ta	+ssf	±refx or rec	+obsf	±ben dsf
Exponents same as for Chart 1			*-ra* 'thither' *-ni/-nu* 'hither'	*-nya*	Exponents same as for Chart 1				

Examples of Query with Verb Transitive
Conforming to Bidimensional Array Chart 8

The following examples are basically the same as those listed following Chart 2, but here they conform to Chart 8.

1.

vt	t	qm	ta	ssf
panti	*-rni*	*-nya*	*-ka*	*-rnalu*
conjugation 11	non-past	query marker	pres progress	1st pl excl subj

obsf
-jana
3rd pl obj

Pantirninyakarnalujana?
Are we (but not you nor they) spearing them?

2.	vcom	vt	t	qm	ta
	turnu-	*ma*	*-nu*	*-nya*	*-lpa*
	gather	conjugation V	past	query	past
		pick up		marker	imperf

ssf	obsf
zero	*jana*
3rd sing	3rd pl
subj	obj

Turnumanunyalpajana?
Was he gathering them?

3.	vcom	vt	t	man1	qm
	wilypi-	*ma*	*-nu*	*-rra*	*-nya*
	pull	conjugation V	past	thither,	query
		get, take, fetch		away	marker

ta	ssf	obsf
-lpa	*-pala*	zero
past	3rd dual	3rd sing
imperf	subj	obj

Wilypimanurranyalpapala?
Were the two of them pulling it away?

4.	vcom	vcom	vt	t	qm
	juka-	*juka-*	*yirra*	*-rnu*	*-nya*
	poke	poke	conjugation 11	past	query marker

ta	ssf	refx	obsf	ben dsf
zero	zero	*-nyanu*	zero	*-rla*
def past	3rd sing	3rd sing	3rd	3rd sing
	subj	refx	sing	dat

Jukajukayirranunyanyanurla?
Did he repeatedly poke it to himself?

5.	vcom	vcom	vt	t	qm
	pin-	*pin-*	*ma*	*-ni*	*-nya*
	thin		conjugation V	non-past	query
			cause to become		marker

ta	ssf	obsf
-ka	*-rna*	zero
pres	1st sing	3rd sing
progressive	subj	obj

Pinpinmaninyakarna?
Am I making it thinner and thinner?

6.

vt	t	qm	ta	ssf	obsf
pu	*-ngu*	*-nya*	*kula*	*-rnalu*	*jana*
conjugation 111	past	query	def neg	1st pl	3rd pl obj
kill		marker	past	excl	

Pungunyakularnalujana?
Did we (but not you nor they) not not kill them?

(Note: a negative in the declarative becomes a double negative in a query in English in order to retain its meaning)

7.

vt	t	qm	ta	ssf	obsf
nya	*-ngkarla*	*-nya*	*kapi*	*-rna*	*-ngku*
conjugation 111	irrealis	query	immed	1st sing	2nd sing
		marker	fut	subj	obj

Nyangkarlanyakapirnangku?
Would I soon see you?

8.

vt	t	qm	ta	ssf	obsf	ben dsf
yi	*-nyi*	*-nya*	*kapu*	*-rna*	zero	*-ngku*
conjugation 111	non-past	query	dist fut	1st sing	3rd sing	2nd sing
give		marker		subj	obj	dative

Yinyinyakapurnangku?
Will I give it to you after a long time?

9.

vt	t	qm	ta	sf	obsf
purra	*-ja*	*-nya*	zero	*-rnalu*	zero
conjugation 1	past	query	defn	ist pl	3rd sing
cook		marker	past	excl	object
				subj	

Purrajanyarnalu?
Did we (but not you nor they) cook it?

10.	vt	t	qm	ta	ssf
	ngarri	*-rni*	*-nya*	*kulaka*	*-rna*
	conjugation 11	non-past	query	neg pres	1st sing
	tell		marker		subj

refx	obsf	ben
		dsf
-ju	zero	*-ju*
1st sing	3rd sing	1st sing
reflexive	obj	dat

Ngarrirninyakulakarnajuju.
Am I not not telling it to myself?

11.	vt	t	qm	ta	ssf
	nga	*-rnu*	*-nya*	*-lpa*	*-rnalu*
	conjugation 1V	past	query	past	1st pl
	eat, drink		marker	imperfective	excl subj

obsf
-jana
3rd pl
obj

Ngarnunyalparnalujana?
Were we (but not you nor they) eating them?

12.	vt	t	qm	ta
	yirra	*-rni*	*-nya*	zero
	conjugation 11	non-past	query	indef pres
	put		marker	or fut

ssf	obsf	ben
		dsf
zero	zero	*-rla*
3rd sing	3rd sing	3rd sing
subj	obj	dative

Yirrarninyarla?
Does (or will) he put it to him some time or other?

13.	vt	t	qm	ta
	ma	*-ni*	*-nya*	zero
	conjugation V	non-past	query	indef pres
	get, take, fetch		marker	or fut

ssf	refx	obsf	ben
			dsf
zero	*-nyanu*	zero	*-rla*
3rd sing	3rd sing	3rd sing	3rd sing
subj	reflexive	obj	dative

Maninyanyanurla?
Does (or will) he get it for himself some time or other?

14.

vt	t	qm	ta
yarlki	*-rni*	*-nya*	*-ka*
conjugation 11	non-past	query	pres
bite		marker	progressive

ssf	rec
-pala	*-nyanu*
3rd dual	3rd dual
subj	reciprocal

Yarlkirninyakapalanyanu?
Are the two of them biting one another?

15.

vt	t	qm	ta	ssf
luwa	*-rnu*	*-nya*	zero	zero
conjugation 11	past	query	defin	3rd sing
shoot		marker	past	sugj

obsf
zero
3rd sing
obj

Luwarnunya?
Did he shoot him?

CHART 9

BIDIMENSIONAL ARRAY OF QUERY WITH VERB TRANSITIVE (VERSION 2)

+obn	+qm	+ta	+ssf	±refx or rec	±ben dsf	±vcom	+vt +t	±man1
nouns with or without modifiers, demonstratives, pronouns	*-nya*	←					→	*-rra* 'thither' *-rni/-rnu* 'hither'

Notes: a. obn in the above Chart 9 is obligatory whereas in Chart 2 it was optional; this is so because ±con of Chart 2 has been omitted here, thus shifting obn into string-initial position' and if obn were still optional here as in Chart 2, then qm would at times occur string-initially, and that is not permissible. Also see note a. following Chart 2.

b. The above Chart 9 is patterned after Chart 2 except that three optional tagmemes occurring in Chart 2 do not occur in Chart 9, ±obn has become obligatory, and +qm has been added to the position preceding +ta as in Chart 8. Also ±man1 with only two exponents is still in position following +t as in Chart 8.

Examples of Query with Verb Transitive
Conforming to Bidimensional Array Chart 9

The following examples are basically those illustrating Chart 2 but altered to conform to Chart 9 .

1.

obn	qm	ta	ssf	vt	t
yapa	*-nya*	*-ka*	*-rnalu*	*panti*	*-rni*
people	query marker	pres progress	1st pl excl subj	conjugation 11 spear	non past

Yapanyakarnalupantirni?
Are we (but not you nor they) spearing the people?

2.

obn	qm	ta	ssf	vcom	vt	t
ngarrka	*-nya*	*-lpa*		*turnu-*	*ma*	*-nu*
men	query marker	past imperfect	3rd sing subj	gather	conjugation V pick up	past

Ngarrkanyalpaturnumanu?
Was he gatherine men?

3.

obn	qm	ta	ssf	vcom	vt	t	man1
yama	*-nya*	*-lpa*	*-pala*	*wilypi-*	*ma*	*-nu*	*-rra*
	query marker	past imperfect	3rd dual subj	pull	conjugation V get, take, fetch	past	thither

Yamanyalpapalawilypimanurra?
Were the two of them pulling the shade away?

4.

obn	qm	ta	ssf	refx	ben dsf
kurlarda	*-nya*	zero	zero	*-nyanu*	*-rla*
spear	query marker	def past	3rd sing subj	3rd sing refx	3rd sing dative

vcom	vcom	vt	t
juka-	*juka-*	*yirra*	*-rnu*
poke	poke	conjugation 11 put	past

Kurlardanyanyanurlajukajukayirrarnu?
Did he repeatedly poke the spear to himself?

5.

obn	qm	ta	ssf	vcom	vcom
karli	*-nya*	*-ka*	*-rna*	*pin-*	*pin-*
boomerang	query marker	pres progress	1st sing subj	thin	thin

vt	t
ma	*-ni*
conjugation V cause to become	non-past

Karlinyakarnapinpinmani?
Am I making the boomerang thinner and thinner?

6.

obn	qm	ta	ssf	vt	t
kurrinji	*-nya*	*kula*	*-rnalu*	*pu*	*-ngu*
kurrinji	query marker	def neg past	1st pl excl	conjugation 111 kill	past

Kurrinjinyakularnalupungu?
Did we (but not your nor they) not not kill the Kurrinjis?

7.

obn	qm	ta	ssf	vt	t
nyuntu	*-nya*	*kapi*	*-rna*	*nya*	*-ngkarla*
2nd pers sing pronoun you	query marker	immed fut	1st sing subj	conjunction 111 see	irrealis

Nyuntunyakapirnanyangkarla?
Would I soon see you?

8.

obn	qm	ta	ssf	ben dst	vt	t
makiti	*-nya*	*kapu*	*-rna*	*-ngku*	*yi*	*-nyi*
gun	query marker	dist fut	1st sing subj	2nd sing dative	conjugation 111 give	non-past

Makitinyakapurnangkuyinyi?
Will I give the gun to you after a long time?

9.

obn	qm	ta	ssf	vt	t
kuyu	*-nya*	zero	*-rnalu*	*purra*	*-ja*
meat	query marker	defin past	1st pl excl subj	conjugation 1 cook	past

Kuyunyarnalupurraja?
Did we (but not you nor they) cook the meat?

10.

obn	qm	ta	ssf	refx	ben dsf
yimi	*-nya*	*kulaka*	*-rna*	*-ju*	*-ju*
story	query marker	neg pres	1st sing subj	1st sing reflexive	1st sing dative

Yiminyakulakarnajujungarrirni?
Am I not not telling the story to myself?

11.

obn	qm	ta	ssf	vt	t
yakajirri	*-nya*	*-lpa*	*-rnalu*	*nga*	*-rnu*
bush tomato	query marker	past imperfective	1st pl excl subj	conjugation 1V eat	past

Yakajirrinyalparnalungarnu.
Were we (but not your nor they) eating bush tomatoes?

12.

obn	qm	ta	ssf	vt	t
mukarti	*-nya*	zero	zero	*yirra*	*-rni*
hat	query marker	indef pres or fut	3rd sing subj	conjugation 11 put	non-past

Mukartinyayirrarni?
Does (or will) he put the hat (to him) some time or other?

13.

obn	qm	ta	ssf	refx	ben dsf
yurlpa	*-nya*	zero	zero	*-nyanu*	*-rla*
red ochre	query marker	indef pres or fut	3rd sing subj	3rd sing reflexive	-rla 3rd sing dat

vt	t
ma	*-ni*
conjugation V get, take, fetch	non-past

Yurlpanyanyanurlamani?
Does he (or will he) get the red ochre for himself some time or other?

14.

obn	quan	qm	ta	ssf	rec
maliki	*-jarra*	*-nya*	*-ka*	*-pala*	*-nyanu*
dog	two	query marker	pres progress	3rd dual subject	3rd dual reciprocal

vt	t
yarlki	*-rni*
conjugation 11 bite	non-past

Malikijarranyakapalanyanuyarlkirni?
Are the two dogs biting one another?

15.

obn	qm	ta	ssf	vt	t
nantuwu	*-nya*	zero	zero	*luwa*	*-rnu*
horse	query marker	def past	3rd sing subj	conjugation 11 shoot	past

Nantuwunyaluwarnu?
Did he shoot the horse?

5.2 QUERY WITH VERB INTRANSITIVE

In the preceding section the query with verb transitive was presented in two versions, and in this section the query with verb intransitive will conform to the two versions as presented in Charts 4 and 5, except that they query marker position will have been added and some optional tagmemes deleted or modified.

CHART 10

BIDIMENSIONAL ARRAY OF QUERY WITH VERB INTRANSITIVE (VERSION 1)

±vcom	+vi	+t	±man1	+qm	+ta	+ssf
←EXPONENTS SAME AS FOR CHART 4→			-řa 'thither' -ni/-nu 'hither'	-nya	←EXPONENTS SAME AS FOR CHART 4→	

Examples of Query with Verb Intransitive Conforming to Bidimensional Array Chart 10

The following examples are taken from those following Chart 4, but modified to conform to Chart 10.

1.

vcom	vcom	vi	t	man1	qm
jingi-	*jingi*	*ya*	*-nu*	*-rnu*	*-nya*
smartly progress through		conjugation V go	past	hither	query marker

ta	ssf
zero	zero
def past	3rd sing subj

Jingijingiyanurnunya?
Did he come through quickly and smartly?

2.

vi	t	man1	qm	ta	ssf
parnka	*-ja*	*-rni*	*-nya*	zero	zero
conjugation 1 run	past	hither	query marker	def past	3rd sing subj

Parnkajarninya?
Did he come running?

3.

vcom	vi	t	qm	ta	ssf
muku-jarda	*wanti*	*-ja*	*-nya*	zero	*-lu*
total sleep	conjugation 1 fall	past	query marker	def past	3rd pl subj

Mukujardawantijanyalu?
Did they fall totally asleep? (Did they die?)

4.

vcom	vi	t	qm	ta	ssf
yakarra	*pardi*	*-ja*	*-nya*	*zero*	*-rnalu*
awake	conjugation 1	past	query	def past	1st pl
	rise		marker		excl subj

Yakarrapardijanyarnalu?
Did we (but not you or they) awake and get up?

5.

vcom	vi	t	qm	ta	ssf
yirrkinypa-	*ya*	*-nu*	*-nya*	*kula*	*-nkulu*
together,	conjugation V	past	query	def neg	2nd pl
in a group	go		marker	past	sugj

Yirrkinypayanunyakulankulu?
Did not you all not go together (in a group)?

6.

vcom	vi	t	qm	ta	ssf
kurnta-	*jarri*	zero	*-nya*	*kukuka*	zero
ashamed	conjugation 1	non-past	query	not yet	3rd sing
	become		marker	even	subj

Kurntajarrinyakukuka?
Is she not even yet not becoming ashamed?

7.

vcom	vi	t	qm	ta	ssf
jupu-	*karri*	*-ja*	*-nya*	zero	*-rli*
stop	conjugation 1	past	query	def past	1st dual
	stand		marker		incl

Jupukarrijanyarli?
Did you and I stop?

8.

vi	t	man1	qm	ta	ssf
wangka	*-mi*	*-rni*	*-nya*	*-ka*	*-pala*
conjugation 1	non-	hither	query	pres	3rd dual
speak	past		marker	progress	subj

Wangkamirninyakapala?
Are the two of them speaking this way (hither)?

9.

vcom	vi	t	man1	qm	ta	ssf
pingka	*karli*	*-mi*	*-rra*	*-nya*	*kula*	zero
slowly	conjugation 1	non	thither	query	neg fut	3rd sing
	flow	past		marker		subj

Pingkakarlimirranyakula?
Will it not slowly flow away?

10.

vcom	vi	t	qm	ta	ssf
murnturr	*ma*	*-nu*	*-nya*	zero	*-lu*
roar	conjugation V make, cause	past	query marker	def past	3rd pl subj

Murnturrmanunyalu?
Did they roar?

11.

vcom	vi	t	man1	qm
karalyarr	*nga*	*-lku*	*-rra*	*-nya*
slip slide	conjugation 1V semantically empty	fut	thither	query marker

ta	ssf
zero	zero
no meaning	3rd sing subj

Karalyarrngalkurranya?
Will it slide away (thither)?

12.

vi	t	qm	ta	ssf
mati	*-rni*	*-nya*	zero	*-lu*
conjugation 11 go one behind the other, in single file	non-past	query marker	indef pres or fut	3rd pl subj

Matirninyalu?
Do (or will) they go in single file some time or other?

13.

vcom	vi	t	qm	ta	ssf
juwuly-	*pu*	*-ngku*	*-nya*	zero	zero
jump	conjugation 111 hit, but no meaning here	fut	query marker	no meaning	3rd sing subject

Juwulypungkunya?
Will he jump?

14.

vcom	vi	t	qm	ta	ssf
walkurrji-	*ma*	*-nu*	*-nya*	zero	zero
bark	conjugation V make, cause	past	query marker	def past	3rd sing subj

Walkurrjimanunya?
Did it bark

15.	vcom	vi	t	qm	ta	ssf
	kulu	*jarri*	zero/-mi	*-nya*	zero	zero
	fight	conjugation 1 become	non-past	query marker	indef pres of fut	3rd sing subj

Kulujarriminya?
Does (or will) he become angry some time or other?

CHART 11

BIDIMENSIONAL ARRAY OF QUERY WITH VERB INTRANSITIVE (VERSION 2)

<table>
<tr><td>+vcom</td><td>+qm</td><td>+ta</td><td>+ssf</td><td>+vi</td><td>+t</td><td>±man1</td></tr>
<tr><td colspan="7">← SAME EXPONENTS AS FOR CHART 10 →</td></tr>
</table>

Note that this version may not be used without a vcom because qm may not occur string-initial.

The above string can be derived from Chart 10 via the following changes and permutations:

a. change ±vcom to +vcom

b. permute +vi and +t and ± man1 to position following +ssf

Examples of Query with Verb Intransitive
conforming to Bidimensional Array Chart 11

The following examples are taken from those following Chart 10 but are modified to conform to Chart 11. Those that had no vcom are omitted and thus there are gaps in the numerical sequence, since the numbering of the examples has been retained for ease of cross-reference.

1.	vcom	vcom	qm	ta	ssf
	jingi-	*jingi-*	*-nya*	zero	zero
	smartly	smartly	query	def past	3rd sing

vi	t	man1
ya	*-nu*	*-rnu*
conjugation V go	past	hither

Jingijinginyayanurnu?
Did he come through quickly and smartly?

3.

vcom	qm	ta	ssf	vi	t
muku-jarda	*-nya*	zero	*-lu*	*wanti*	*-ja*
total sleep	query marker	def past	3rd pl subj	conjugation 1 fall	past

Mukujardanyaluwantija?
Did they fall totally asleep (Did they die?)

4.

vcom	qm	ta	ssf	vi	t
yakarra	*-nya*		*-rnalu*	*pardi*	*ja*
awake	query marker	def past	1st pl excl subj	conjugation 1 rise	past

Yakarranyarnalupardija?
Did we (but not you nor they) awake and get up?

5.

vcom	qm	ta	ssf	vi	t
yirrkinypa	*-nya*	*kula*	*-nkulu*	*ya*	*-nu*
together in a group	query marker	def neg past	2nd pl subj	conjugation V go	pas

Yirrkinypanyakulankuluyanu?
Did not you all not go together (in a group)?

6.

vcom	qm	ta	ssf	vi
kurnta-	*-nya*	*kukuka*	zero	*jarri*
ashamed	query marker	not yet even	3rd sing subj	conjugation 1 become

Kurntanyakukukajarri?
Is she not even yet not becoming ashamed?

7.

vcom	qm	ta	ssf	vi	t
jupu-	*-nya*	zero	*-rli*	*karri*	*-ja*
stop	query marker	def past	1st dual incl	conjugation 1 stand	past

Jupunyarlikarrija?
Did you and I stop?

9.

vcom	ta	ssf	vi	t	man1
pingka	*kula*	zero	*karli*	*-mi*	*-rra*
slowly	neg fut	3rd sing subj	conjugation 1 flow	non-past	thither

Pingkakulakarlimirra?
Will it not slowly flow away?

10.

vcom	qm	ta	ssf	vi	t
murnturr	*-nya*	zero	*-lu*	*ma*	*-nu*
roar	query marker	def past	3rd pl subj	conjugation V make, cause	past

Murnturrnyalumanu?
Did they roar?

11.

vcom	qm	ta	sst	vi
karalyarr	*-nya*	zero	zero	*nga*
slip, slide	query marker	no meaning	3rd sing subj	conjugation 1V semantically empty

t	mani
-lku	*-rra*
fut	thither

Karalyarrnyangalkurra?
Will it slide away (thither)?

13.

vcom	qm	ta	sst	vi
juwuly	*-nya*			*pu*
jump	query marker	no meaning	3rd sing subj	conjugation 111 hit, but no meaning here

t
-ngku
fut

Juwulynyapungku?
Will he jump?

14.

vcom	qm	ta	ssf	vi
walkurr	*-nya*	zero	zero	*ma*
bark	query marker	def past	erd sing subj	conjugation V make, cause

t
-nu
past

Walkurrnyamanu?
Did it bark?

15.

vcom	qm	ta	ssf	vi
kulu	*-nya*	zero	zero	*jarri*
fight	query marker	indef pres or fut	3rd sing subj	conjugation 1 become

t
zero/*-mi*
non-past

Kulunyajarrimi?
Does (or will) he become angry some time or other?

5.3 QUERY WITH VERB TRANSITIVE OR INTRANSITIVE AND LOCATIVE

In the collected texts, only a few examples of queries with transitive or intransitive verbs and the locative have been found to occur. Therefore it has not been possible to arrive at reliable results that could have been summarized in bidimensional arrays; and so nothing more will be said in this paper about queries with transitive or intransitive verbs coupled with the locative.

5.4 QUERY WITH VERB STATIVE

Queries with stative verbs are quite common in Ngardilpa and are manifested in simple constructions, as the following will demonstrate.

CHART 12

BIDIMENSIONAL ARRAY OF QUERY WITH VERB STATIVE

+vs	±man	+qm	+ssf
← See Chart 7 →		*-nya*	See Matrix 3

The only difference between this Chart 12 and Chart 7 is the addition of +qm to the position preceding +ssf.

Examples of Query with Verb Stative

The following examples are taken from those illustrating Chart 7; only the query marker has been added to each example to make it conform to Chart 12.

1.

vs	qm	ssf
pirrjirdi	*-nya*	*-rna*
strong	query marker	1st sing subj

Pirrjirdinyarna?
Am I strong?

2.

vs	man	qm	ssf
wiri	*-lku*	*-nya*	zero
big	now	query marker	3rd sing subj

Wirilkinya?
Is he big now? (Is he an adult or man now?)

3.

vs	man	qm	ssf
ngarrka	*-lku*	*-nya*	*-rna*
man	now	query marker	1st sing subj

Ngarrkalkunyarna?
Am I (a) man now?

4.

vs	qm	ssf
wuukayi	*-nya*	*-npa*
exhausted	query marker	2nd sing subj

Wuukayinyanpa?
Are you exhausted?

5.

vs	qm	ssf
kalinyanu	*-nya*	*-rnalu*
wife	query marker	1st pl excl

Kalinyanunyarnalu?
Are we (but not you nor they) wives?

6.

vs	qm	ssf
japangardi	*-nya*	*-rna*
name of males belonging to that particular skin group	query marker	1st sing subj

Japangardinyarna?
Am I (a) Japangardi?

7.

vs	man	qm	ssf
palka	*-lku*	*-nya*	*-rna*
present	now	query marker	1st sing subj

Palkalkunyarna?
Am I present (here) now?

8.

obn	vs	man	qm	ssf
ngapa	*palka*	*-lku*	*-nya*	*-rna*
water	find	now	query marker	1st sing subj

Ngapa palkalkunyarna.
Am I finding (or did I find) water now?

9.

vs	qm	ssf
kari	*-nya*	*-pala*
other	query marker	3rd dual subj

Karinyapala?
Are the two of them the other ones?

10.

adv	vs	qm	ssf
nyurruwiyi	*lani*	*-nya*	*-rlijarra*
long time ago	frightened	query marker	1st dual excl

Nyurruwiyi laninyarlijarra?
Were we two (but not you nor they) frightened long time ago?

11.

vs	qm	ssf	adv
murrumurru	*-nya*	*-rna*	*purrarni*
sick	query marker	1st sing subj	yesterday

Murrumurrunyarnapurrarni?
Was I sick yesterday?

12.

adv	vs	qm	ssf
jukurrapardukari	*pina*	*-nya*	*-nkulu*
day after tomorrow	return	query marker	2nd pl subj

Jukurrapardukari pinanyankulu?
Will you all return the day after tomorrow?

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SYNTACTIC STRUCTURE OF WARLPIRI CLAUSES

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0. INTRODUCTION

Warlpiri[1] is an ergative language, by which is meant that subject noun phrases in intransitive clauses are case-marked identically to object noun phrases in transitive clauses, that is, by ABSOLUTIVE case. These then are distinguished from subject noun phrases in transitive clauses which are case-marked by ERGATIVE case. The semantic relations between a predication and its accompanying arguments are manifested by these and other grammatical cases suffixed to all noun phrases and free pronouns.[2] A maximum of two noun phrases per clause are also echoed by a set of pronominal clitics, cross-referencing these noun phrases as per person and number. These clitics are represented in Chart 1.

(Note: Warlpiri orthography and the grammatical abbreviations used in this paper are given in Appendix 1.)

CHART 1

Pronominal Clitics

Person-Number	Subject Order 1 Clitics	Non-Subject Order 2 Clitics
1 Sg	- *rna*	*-ju ∿ ji*
1 du in	- *rli*	*-ngali(ngki)*
1 du ex	*-rlijarra ∿ -rlujarra*	*-jarrangku*
1 pl in	- *rlipa ∿ rlupa*	*-ngalpa*
1 pl ex	- *rnalu*	*-nganpa*
2 sg	- *npa*	*-ngku ∿ ngki*
2 du	- *npa(pa)la*	*-ngkupala*
2 pl	- *nkulu ∿ -nkili*	*-nyarra*
3 sg	Ø	Ø
3 du	- *pala*	*-palangu*
3 pl	*-lu ∿ li*	*-jana*

These clitics are suffixed in a fixed order onto a tense-aspect catalyst which occurs as either the first or second word in the clause. This combination of catalyst plus pronominal clitics I shall call the catalyst complex. Tense and aspect are signalled jointly by the particular catalyst used and the tense inflection on the verb.

Because of the cross-referencing feature, partial or wholesale nominal deletions can occur. Well formed clauses may consist of a verb plus catalyst complex only, or with these two constituents and fewer overt nominals than would be expected from the transitivity class of that verb. For a simple over-view of elementary Warlpiri syntax, consider the following two examples:

(1) *Kurdukurdu-ku-lpa-lu-jana* *yu-ngu* *nalija-Ø*
children-DAT-CAT- 3pl - 3pl give-PAST tea-ABS

karnta-patu-rlu.
woman-pl-ERG

'The women were giving tea to the children.'

(2) *Nalija-Ø-lpa-lu-jana* *yu-ngu.*
tea-ABS-CAT-3pl-3pl give-PAST

'They (2 or more) were giving tea to them (2 or more).'

Example (2) is a paraphrase of (1) with all but one nominal deleted. In (2) the givers and recipients of the tea can be discovered only from the context, although the pronominal clitics indicate they are at least dual in number.[3]

Upon examination one finds that only certain of the case-marked noun phrases (hereafter referred to as NPs) in any particular clause are cross-referenced by the pronominal clitics within the catalyst complex. Specifically it is only those NPs marked for either ERGATIVE, ABSOLUTIVE or DATIVE case which are so cross-referenced. Person and number features of the other case-marked NPs, specifically ALLATIVE, ABLATIVE, LOCATIVE, INSTRUMENTAL, AVERSIVE, COMITATIVE, CAUSATIVE, PRIVATIVE, PERLATIVE, ACCIDENTAL, and PURPOSIVE[4] are not relevant in terms of the cross-referencing.

ERGATIVE, ABSOLUTIVE, and DATIVE cases are commonly called 'syntactic cases'. In Warlpiri it is only these syntactic cases which may be cross-referenced by the pronominal clitics. The other cases are thus labelled non-syntactic.

Given the information that there are three syntactic cases but only two sets of pronominal clitics with which to cross-reference these, it is clear that whenever a combination of any of these syntactic NPs occurs in a clause with a particular verb, one of them cannot be cross-referenced. One further finds that it is possible to have two syntactic DATIVE NPs in the same clause, both of which may potentially be cross-referenced, thus opening up the possibility of having four syntactic NPs in a single clause, that is, ABSOLUTIVE, ERGATIVE, DATIVE, and DATIVE. Again, only two of these NPs can possibly be cross-referenced by the pronominal clitics, but which two? What is the basis for deciding?

The aims of this paper are therefore:

(1) to discuss briefly the semantic relations which hold between predications and their accompanying arguments;

(2) to set up verb classes on the basis of the syntactic NPs which are necessary for (but not necessarily made explicit in) non-deviant sentences;

(3) to give evidence of and to account for possible expansions of syntactic NPs within a clause;

(4) to set forth a set of pronominal clitics and give both a

grammatical and a semantic basis for the flexible hierarchical selection process which affects the cross-referencing of the syntactic NPs; and

(5) to compare this analysis with that of Kenneth Hale in his article 'Person Marking in Warlpiri' (Hale 1973).

Data for this paper is primarily of an elicited nature. The analysis represents potential speech performance and is not based upon typical speech patterns. Although the examples given herein are grammatical, as attested to by native speakers, various discourse features beyond the scope of this study allow the native speaker of Warlpiri to express many of the cited data in shorter, more natural, form.

1. SEMANTIC FEATURES OF VERBS

A proposition consists of a predication plus accompanying arguments which are either obligatorily or optionally associated with that predication. That is, in reference to the real world we do not and normally cannot conceive of an activity or process apart from the thing that is acting or is involved in some way with that activity or process. We find that these semantic arguments are obligatorily associated with a predication and are inextricably bound up within the meaning of the predication itself. Without these obligatory arguments, the meaning of the predication is altered and thus becomes either meaningless or a different predication altogether. For example, the English verb 'give' is obligatorily associated with the following arguments: a giver, a recipient, and an item which is given. Remove any one of these arguments and one no longer has the predication 'give'.

Optional arguments, however, do not distort the basic meaning of a predication. Rather they serve to extend the meaning by qualifying or elaborating upon the predication, in a manner which is in no way central to it. For instance with the verb 'give' one can include a 'reason' argument such as 'for Christmas', as in 'John gave Mary the book for Christmas.' Or one can add a 'causer' argument such as 'Mother made John give Mary the book.' Both 'causer' and 'reason' are optional, yet English grammar imposes certain restrictions upon the one and not the other; that is, NPs manifesting reason have different options as far as word order is concerned than do NPs manifesting causer.

The claim here is that there are levels of optionality in Warlpiri syntax as there are in English. These levels are indicated grammatically by the fashion in which the catalyst complex may manifest certain optional NPs at the expense of more obligatory or more semantically nuclear NPs.

Earlier it was stated that the scope of the paper involves careful examination of the syntactic case system and the system of cross-referencing pronominal clitics, more specifically, the relation between the two. A basic assumption in all of this is that the systems do not operate in an arbitrary fashion but rather reflect a native speaker's conceptualization of the real world. Stated differently, I am working from the assumption that the inter-relationships between the catalyst cross-referencing system and the syntactic case system can only be fully explicated on a semantic basis.

Consider the following two examples:

(3) *Wati-Ø-Ø*[5] *ya-nu* *kurdu-kurlu.*
man-ABS-3sg go-PAST child-COM

'The man went with the child.'

(4) *Wati-Ø-ji-Ø-rla* *jirrnganja* *ya-nu* *kurdu-ku*
man-ABS-TP-3sg-3sg 'having' PV go-PAST child-DAT

'The man went with the child.'

Although both (3) and (4) can be translated with the same English sentence, there is a significant semantic difference between the two examples. The child in (3) *kurdu* is marked by the non-syntactic COMITATIVE case and is not manifested in the catalyst complex. Thus the child is a bit of incidental information in very loose association with the subject of the sentence *wati* or the action of the verb *ya-*.

However in (4) the use of the pre-verb *jirrnganja* 'having' the use of DATIVE case on *kurdu* 'child', and the cross-referencing by *-rla* within the catalyst complex all serve to draw the clause participants together in tight association. The use of *-rla* will be dealt with more fully below. The man in (4) would be seen to be responsible for the child in some way, a notion not gained from (3). Thus, although *kurdu* 'child' is certainly an optional second participant with the verb *ya-* 'go', it can be seen that a speaker has the grammatical option of semantically 'tying in' the second participant either loosely or tightly. This flexibility within the use of the pronominal clitics as they relate to verbs of varying degrees of transitivity is, as stated earlier in aim (4), of primary interest here.

2. SYNTACTIC VERB CLASSES

2.1 DEFINITION OF KEY TERMS

The reader should now refer to chart 2, as subsequent discussion revolves around it.

The top set of boxes in chart 2 is a conceptualization of Warlpiri syntactic verb classes based upon the occurrence of syntactic NPs as fillers of clause level slots. The bottom section of boxes shows how these NPs are echoed by the catalyst complex. Two concurrent parameters are posited which determine the clause level slots, namely SYNTACTIC versus NON-SYNTACTIC and, within the syntactic parameter, INNER NUCLEUS versus OUTER NUCLEUS.

In chart 2, cases which are underlined always get cross-referenced. Thus, ABS NPs with transitive verbs will be cross-referenced by the Order 2 clitics unless there is also a syntactic dative (DAT$_1$) associated with the verb. DAT$_1$ NPs with any verb will always be cross-referenced by the Order 2 clitics unless superseded by a further syntactic dative (DAT$_2$). This will be clarified later.

The pronominal clitics are organized on a nominative-accusative pattern. That is, Order 1 clitics only cross-reference SUBJECT, and Order 2 clitics only cross-reference OBJECT.

The parentheses indicate optionality of occurrence of the particular NPs.

The forms of DAT$_1$, DAT$_2$, and the non-syntactic PURPOSIVE NPs are identical. That DAT$_1$ and DAT$_2$ NPs are in fact distinguishable is, as a sub-point of aim (3), a major thesis of this paper. Some further clarification is appropriate here.

Earlier it was stated that ERGATIVE, ABSOLUTIVE, and DATIVE are the syntactic cases and that only these cases may be cross-referenced by pronominal clitics. It was also stated that it is not possible to cross-reference more than two of these cases in any one clause. Thus a syntactic NP which is cross-referenced in one clause may, with the same verb, be superseded in the cross-referencing in another clause which happens to carry an added syntactic NP. Consider the following examples:

(5) *Wati-ngki-Ø-palangu* *marlu-jarra-Ø* *luwa-rnu.*
man-ERG-3sg-3du kangaroo-two-ABS shoot-PAST

'The man shot two kangaroos.'

CHART 2
CLAUSE STRUCTURE

Semantic Syntactic Verb Classes Clause level slot	SYNTACTIC CASES			NON-SYNTACTIC CASES
	INNER NUCLEUS		OUTER NUCLEUS	
Intransitive (I)	ABS	(DAT$_1$) + Rule 1	(DAT$_2$) + Rule 2	(LOCATIVE) (ABLATIVE) (ALLATIVE) (INSTRUMENTAL) (CAUSATIVE) (AVERSIVE) (COMITATIVE) (PRIVATIVE) (PURPOSIVE) (PERLATIVE) (ACCIDENTAL)
Bi-Intransitive (BI)	ABS	DAT$_1$ + Rule 1	(DAT$_2$) + Rule 2	
Middle (M)	ERG	DAT$_1$ + Rule 1	(DAT$_2$) + Rule 2	
Transitive (T)	ERG	[ABS (DAT$_1$) + Rule 1	(DAT$_2$) (DAT$_2$)] + Rule 2	
Bi-Transitive (BT)	ERG	ABS (DAT$_1$) + Rule 1	DAT$_2$ + Rule 2	

CATALYST	SUBJECT + Order 1 Clitics	NON-SUBJECT ± Order 2 Clitics
Catalyst Complex		

(6) *Wati-ngki-Ø-rla* *marlu-jarra-Ø* *luwa-rnu*
man-ERG-3sg-3sg kangaroo-two-ABS shoot-PAST

warlalja-ku.
family-DAT$_1$

'The man shot two kangaroos for his family.'

While the pronominal clitic *-palangu* cross-references the ABSOLUTIVE marked NP *marlu-jarra-Ø* 'kangaroo-two-ABS' in (5), the same NP in (6) is superseded; that is, the non-subject pronominal clitic cross-references the DATIVE marked NP *warlalja-ku* 'family-DAT$_1$' as per person and number. Thus the ABSOLUTIVE NP in a clause containing the verb *luwa* 'shoot' may or may not be cross-referenced, depending on the absence or presence respectively of a further syntactic NP marked by DATIVE. Furthermore, the semantic relation of Agent-Patient between the ERGATIVE marked NP and the ABSOLUTIVE marked NP is unaffected by the addition of the DATIVE marked NP in the role of BENEFACTIVE.

Pike and Pike (1977:27) list several characteristics exhibited by nuclei and margins on every level of the hierarchy. I quote two of these as having special relevance to the ideas being presented here. They state:

'We assume that probably the **nucleus** (in contrast to the **margin**):... more frequently has the option of representing the entire unit, of which it is a part, in larger units; and is more likely to identify the larger construction of which it is a part.' They state further that probably the nucleus' ... has the more central semantic role (in the analyst's judgment).'

As demonstrated earlier in example (2), the function of the pronominal clitics is to echo certain of the semantic components of the unit which it cross-references within the larger unit of the clause. This allows for deletions of syntactic NPs without the total loss of information. Non-syntactic NPs cannot be deleted without the total loss of that information within the clause; and non-syntactic NPs are always, in my judgment, less central semantically to the verb than syntactic NPs. That Warlpiri speakers make relatively little use of free pronoun forms in everyday speech accentuates the important clause function of the pronominal clitics.

This supplies further bases for positing, as I have done, the nuclearity of the syntactic cases versus the marginality of the non-syntactic cases. Going one step further, I have also posited, within the nucleus itself, Inner versus Outer Nucleus based upon
1) the syntactic criteria within the system of cross-referencing pronominal clitics and
2) semantic criteria involving propositional arguments inherent to or relatively closely linked with the verb predication itself.

The result of this is that a distinction can be made between the two syntactic DATIVEs possible within a single clause, and these I will label as DAT_1 and DAT_2. The precise nature of DAT_1 and DAT_2 will be made clear in the remainder of section 2.

2.2 INTRANSITIVE VERBS

The class of intransitive verbs (hereafter referred to as I-verbs) comprises a very large class of Warlpiri verbs. Some representative I-verbs are:

nyina-	'sit, be'
wanti-	'fall'
parnka-	'run'
mirilykarri-	'shine brightly'
wangka-	'speak'
ya-	'go'

I-verbs require only one NP to be cross-referenced by one of the set of subject pronominal clitics. That NP will be in ABSOLUTIVE case and may be deleted within the clause.

(7) *Wati-Ø* *ka-Ø* *wangka-mi.*
man-ABS CAT-3sg speak-NONPAST

'The man is speaking.'

(8) *Ya-nu-lpa-lu* *kurdukurdu-Ø* *wiriwiri-Ø.*
go-PAST-CAT-3pl children-ABS adults-ABS

'The children and adults were going.'

In both (7) and (8) person and number of the subject are manifested by the appropriate pronominal clitic. Subject pronominal clitics are listed in the second column of chart 1.

It is quite easy for I-verbs to accept a DATIVE NP within the Inner Nucleus, that is, DAT_1. This involves merely the cross-referencing of the DAT_1 NP by the appropriate pronominal clitic as listed in the third column of chart 1. Because of the cross-referencing of this Inner Nucleus DAT_1 NP, the first of a set of ordered rules, namely 'Ø Replacement', must be applied when that NP is third person singular.

ORDERED RULES FOR PRONOMINAL CLITICS

1. Rule 1

   Ø Replacement - Replace Ø with *-rla* in 3 sg with DAT$_1$ NPs

2. Rule 2

   -rla Addition Add *-rla* to all Order 2 clitics with DAT$_2$ NPs

   -rla + rla ——> *-rlajinta*

By themselves (without overt NP referents) non-subject pronominal clitics are thus diagnostic of the presence of DAT$_1$ NPs only when that NP has third person and singular number. Otherwise for all other person and number combinations, the clitic is the same as when it cross-references ABSOLUTIVE NPs with transitive or bi-transitive verbs.

(9)	*Wangka-ja-Ø-jana*	*kuja.*
	speak-PAST-3sg-3pl	thus

'He/she spoke to them thus.'

(10)	*Wanga-ja-Ø-rla*	*jinta-kari-ki-wiyi*	*kirri-ngka-ku.*
	speak-PAST-3sg-3sg	one-other-DAT$_1$-first	camp-LOC-DAT$_1$

'He first spoke to the other one from the camp.'

In these examples the subjects are deleted, yet the person-number information is carried by the pronominal clitics. In (9) both subject and non-subject NPs are deleted, yet their person and number information is carried by the sequence of two pronominal clitics, the maximum allowable number per clause.

It is also possible for at least some I-verbs to accept a third syntactic NP, that is, a second DATIVE NP.[6] The presence of this Outer Nucleus NP is signalled within the catalyst complex by the application of the second ordered rule '*-rla* Addition' (refer to the text following example 8). Note that *-rla + -rla* sequence arrived at by the application of both rules 1 and 2 for third person singular DATIVE NPs results in the complex morpheme *-rlajinta*. The application of the '*-rla* Addition' rule is thus diagnostic of the presence of a DAT$_2$ NP. This applies regardless of any NP deletions which may occur in the clause. The syntactic status of a particular NP as being either DAT$_1$ or DAT$_2$ is determined solely by the application of the ordered rules.

When an I-verb has both DAT$_1$ and DAT$_2$ occurring within the clause, we find that echoing of DAT$_2$ takes precedence over DAT$_1$ in the catalyst complex.

(11) *Wati-Ø-Ø janarla* *marlaja* *wangka-ja* *kurdu-ku*
man-ABS-3sg-3pl causative PV speak-PAST child-DAT$_1$

karnta-patu-ku.
woman-pl-DAT$_2$

'Because of the women, the man spoke to the child.'

In this sentence, if the DAT$_1$ NP *kurdu-ku* 'child-DAT$_1$' were deleted it would be impossible to recover the person and number of the person(s) spoken to. But because of the pronominal clitic *-janarla* which clearly signals the presence of a DAT$_2$ NP by the application of the rule '*-rla* Addition', there would have to be a DAT$_1$ NP in the clause which had been subsequently deleted. We would know that the man in question is definitely talking to someone and not just to himself. Note that the use of the pronominal clitic *-janarla* is diagnostic of the presence of the DAT$_2$ NP *karnta-patu-ku* 'woman-pl-DAT$_2$'. The sentence would be difficult if not impossible to interpret semantically were it not for the use of the causative preverb *marlaja*.

Such usage of a preverb such as *marlaja* or *jirrnganja* (see example 4 and discussion) assists a verb to accept extra syntactic NPs and strongly affects the semantic interpretation of the clause. But the pronominal clitics and not the preverbs determine whether a clause contains, overtly or deleted, a DAT$_1$ NP only or both a DAT$_1$ NP and a DAT$_2$ NP. For example, consider (12):

(12) *Wati-Ø-Ø-jana* *marlaja* *wangka-ja* *karnta-patu-ku.*
man-ABS-3sg-3pl causative PV speak-PAST woman-pl-DAT$_1$

'Because of the women, the man is speaking.'

Example (12) is not a paraphrase of (11); the pronominal clitic *-jana* signals the presence of a DAT$_1$ NP, and a second syntactic DATIVE NP cannot be construed to exist and to be subsequently deleted. The man in (12) is presumably talking to no one in particular.

In summary, I-verbs require only that NP in ABSOLUTIVE case be manifested by one of the set of Order 1 subject clitics to form a non-expanded clause. Some I-verbs can also be associated with up to two non-subject syntactic NPs per clause, both of which will be in DATIVE case. All syntactic NPs are potentially deletable, in which instance the cross-referencing clitics clearly signal the total number of syntactic clause slots being filled. Stated differently the subject NP and one or both of the non-subject NPs may be deleted with retention of person-number information for two of these syntactic NPs. Significantly, as we see from example (11), it is the more semantically peripheral DAT$_2$ NP which takes precedence over the DAT$_1$ NP in the cross-referencing of the non-subject item.

2.3 BI-INTRANSITIVE VERBS

The class of bi-intransitive verbs (hereafter referred to as BI-verbs) comprises approximately two dozen verbs. Some representative members are:

rdipi-	'approach'
parda-	'wait for'
japirdi-	'threaten'
rdanpa-	'accompany'
jija-	'be defeated, overcome by'

BI-verbs require that two NPs be cross-referenced by pronominal clitics. The subject NP will be in ABSOLUTIVE case, and the non-subject NP will be in the DATIVE case, more specifically DAT$_1$. One or both of these NPs may be deleted in the clause with no change in meaning, provided the respective real world referents are recoverable from the context. When the DAT$_1$ NP is third person singular, the rule '∅ Replacement' must be applied to the non-subject pronominal clitic.

(13a) * *Wati-∅ ka-∅ karnta-ku parda-rni.*
man-ABS CAT-3sg woman-DAT$_1$ wait for-NONPAST

(13b) *Wati-∅ ka-∅-rla karnta-ku parda-rni.*
man-ABS CAT-3sg-3sg woman-DAT$_1$ wait for-NONPAST

'The man is waiting for the woman.'

(14) *Karnta-∅-∅-jana kurdukurdu-ku japirdi-ja*
woman-ABS-3sg-3pl children-DAT$_1$ threaten-PAST

'The woman threatened the children.'

Example (13a) is deviant because the DAT$_1$ NP is not manifested in the catalyst complex.

In all respects the cross-referencing of BI-verbs parallels that of I-verbs which occur in expanded clauses, that is, in clauses with extra DATIVE NPs. Thus it is possible for at least some BI-verbs to accept a third syntactic nominal, namely an Outer Nucleus DAT$_2$ NP.

As before, we find that this DAT$_{2}$ NP takes precedence in the cross-referencing over the DAT$_{1}$ NP.

(15)	*Karnta-Ø-Ø-rlajinta*	*kurdukurdu-ku*	*marlaja*
	woman-ABS-3sg-3sg	children-DAT$_{1}$	causative PV
	japirdi-ja	*wati-ki*	
	threaten-PAST	man-DAT$_{2}$	

'Because of the man, the woman threatened the children.'

With BI-verbs it is clearly the DAT$_{1}$ NP non-subjects which are semantically inherent to the meaning of a verb, and, as seen in example (15), when a DAT$_{2}$ NP is included within the clause, this semantically peripheral DAT$_{2}$ NP takes precedence in the cross-referencing. Even if *kurdukurdu-ku* 'children-DAT$_{1}$' in example (15), which is not cross-referenced, were deleted, the pronominal clitic *-rlajinta* clearly indicates the necessary presence of two DATIVE NPs in the clause.

2.4 MIDDLE VERBS

The class of middle verbs (hereafter referred to as M-verbs) comprises a very small number of verbs, perhaps less than five in all. Those known to date are:

warri-	'search for'
rdiwarri ma-	'decimate'
lawa nya-	'fail to see, miss seeing'

M-verbs require that two NPs be cross-referenced by the pronominal clitics. The subject NP will be in ERGATIVE case and the non-subject NP will be in DATIVE case, more specifically DAT$_{1}$. One or both of these NPs may be deleted in the clause with no subsequent effect on the meaning of the verb itself. Again, when the DAT$_{1}$ NP is in third person singular, the rule 'Ø Replacement' must be applied to the non-subject pronominal clitics. Some examples:

(16)	*Wati-ngki*	*ka-Ø-rla*	*karli-ki*	*warri-rni.*
	man-ERG	CAT-3sg-3sg	boomerang-DAT$_{1}$	search for-NONPAST

'The man is searching for the boomerang.'

(17)	*Wati-ngki*	*ka-Ø-palangu*	*karli-jarra-ku*
	man-ERG	CAT-3sg-3du	boomerang-two-DAT$_{1}$
	warri-rni.		
	search for-NONPAST		

'The man is searching for the two boomerangs.'

As with I-verbs and BI-verbs, M-verbs can also accept a second non-subject DAT$_2$ NP. This DAT$_2$ NP takes precedence in the cross-referencing over the DAT$_1$ NP and likewise is semantically peripheral.

(18) *Wati-ngki* *ka-Ø-ngalparla* *karli-ki* *ngalipa-ku*
man-ERG CAT-3sg-1pl(inc) boomerang-DAT$_1$ us(inc)-DAT$_2$
warri-rni.
search-for-NONPAST

'The man is searching for the boomerang for us.'

(19) *Wati-ngki-lpa-Ø-jurla* *nyuntu-ku* *warru-rnu*
man-ERG-CAT-3sg-1sg you-DAT$_1$ search for-PAST
ngaju-ku.
I-DAT$_2$

'The man was searching for you for me.'

The application of the rule '*-rla* Addition' in examples (18) and (19) clearly signals the presence of DAT$_2$ NPs. NPs of any person or number could conceivably be substituted for the DAT$_1$ NPs in examples (18) and (19) without creating grammatically deviant sentences and without affecting the cross-referencing clitics.

2.5 TRANSITIVE VERBS

The class of transitive verbs (hereafter referred to as T-verbs) comprises a very large number of verbs. Some representative members are:

luwa-	'shoot'
nya-	'see'
pu-	'strike, kill'
panti-	'spear'
kiji-	'throw'

T-verbs require that two NPs be cross-referenced by the pronominal clitics. The subject NP will be in ERGATIVE case, and the non-subject NP will be in ABSOLUTIVE case, with one exception which will be noted later in this section. One or both of these NPs may be deleted in the clause with no subsequent effect on the meaning of the verb itself. ABSOLUTIVE NPs will be cross-referenced by the Order 2 non-subject pronominal clitics with none of the ordered rules being applied. Thus third person singular ABSOLUTIVE NPs are cross-referenced by Ø.

(20) *Wati-ngki-Ø-Ø* *marlu-Ø* *luwa-rnu.*
man-ERG-3sg-3sg kangaroo-ABS shoot-PAST

'The man shot the kangaroo.'

(21) *Karnta-ngku* *ka-Ø-jana* *kurdukurdu-Ø* *nya-nyi.*
woman-ERG CAT-3sg-3pl children-ABS see-NONPAST

'The woman sees the children.'

T-verbs readily accept DAT$_1$ NPs, in which instance the ABSOLUTIVE NP is superseded in the cross-referencing by the DAT$_1$ NP while the cross-referencing of the ERGATIVE NP subject remains unchanged.

(22) *Wati-ngki* *ka-Ø-rla* *marlu-patu-Ø* *luwa-rni*
man-ERG CAT-3sg-3sg kangaroo-pl-ABS shoot-NONPAST
karnta-ku.
woman-DAT$_1$

'The man is shooting several kangaroo for the woman.'

The application of the rule 'Ø Replacement' in example (22) signals the presence of three syntactic NPs within the Inner Nucleus. DAT$_1$ NPs added through the use of this rule are typically human and have the role of BENEFACTIVE. Thus with the verb *luwa* 'shoot', to insert an animate but non-human NP in a clause similar to (22) is semantically, but not grammatically, deviant as in:

(23) * *Wati-ngki* *ka-Ø-rla* *marlu-ku* *luwa-rni.*
man-ERG CAT-3sg-3sg kangaroo-DAT$_1$ shoot-NONPAST

Notice that on chart 2 the row for T-verbs divides into two rows. Following along the top row for T-verbs, one sees that it is possible for some T-verbs to accept in the Outer Nucleus a DAT$_2$ NP in addition to an ABSOLUTIVE NP and a DAT$_1$ NP in the Inner Nucleus. This phenomenon is signalled within the catalyst complex by the application of the rule '*-rla* Addition'. When this occurs it is the DAT$_2$ NP which takes precedence in the cross-referencing over both the ABSOLUTIVE NP and the DAT$_1$ NP.

(24) *Wati-ngki* *ka-Ø-palangurla* *marlu-Ø* *kurdu-ku*
man-ERG CAT-3sg-3du kangaroo-ABS child-DAT$_1$
marlaja *luwa-rni* *karnta-jarra-ku.*
causative PV shoot-NONPAST woman-two-DAT$_2$

'Because of the two women, the man is shooting the kangaroo for the child.'

No indication of the person and number of either the ABSOLUTIVE NP or the DAT$_1$ NP is contained within the catalyst complex in (24).

The DAT_2 NP in (24) is so peripheral to the meaning of the verb, that it is doubtful that any sense at all could be made of the sentence if the causative preverb *marlaja* were not there to aid in the interpretation. Again I assert that it is this relative peripheralness with respect to the other syntactic NPs which gives the DAT_2 NP priority in the cross-referencing.

On chart 2 in the bottom half of the row for T-verbs is represented an interesting capability applicable to a small subset of T-verbs, most probably those involving physical impingement. Frustrative aspect can be signalled by

1) changing the non-subject NP which ordinarily is in ABSOLUTIVE case to DATIVE case and
2) applying the rules 'Ø Replacement' and '*-rla* Addition' to the non-subject pronominal clitics.

Syntactically this signals the presence of a DAT_2 NP in the Outer Nucleus. However, there are not concurrently within the clause any other syntactic non-subject NPs as might be expected. Semantically, these changes mean that the action of the verb has been frustrated in some way and that the intent of the action has been unfulfilled. For example:

(25) *Wati-ngki* *ka-Ø-rlajinta* *marlu-ku*
man-ERG CAT-3sg-3sg kangaroo-DAT_2
luwa-rni.
shoot-NONPAST
'The man is shooting and is missing the kangaroo.'

Waters (private communication) suggests that this signalling of the kangaroo as an outer dative indicates that it is unaffected by the action of the verb. He further suggests that all ABSOLUTIVE NPs in a T-clause are connected with the semantic notion of 'affected' or possibly 'intentionally affected'. As was stated earlier, only a few T-verbs can accept this Outer Nucleus DAT_2 NP. When the action itself cannot be performed apart from affecting the ABS NP, such as with the T-verb *jarnti-* 'trim', the verb cannot accept DAT_2 NPs in this special 'unaffected' sense.

In spite of the fact that (25) contains only one DATIVE NP, this NP cannot be construed as being DAT_1 that is, within the Inner Nucleus. In section 2.2, criteria were given to distinguish Inner Nucleus from Outer Nucleus. Syntactically in (25) the pronominal clitics clearly indicate an Outer Nucleus NP by virtue of the application of both ordered rules. The notion of 'frustrated aspect' is simply not within the basic semantics of a verb like *luwa-* 'shoot'.[7] This carrying of aspectual information within the pronominal clitics gives further support to the peripheralness of such a DATIVE NP as one finds in (25).

2.6 BI-TRANSITIVE VERBS

The class of bi-transitive verbs (hereafter referred to as BI-verbs) comprises a relatively small number of verbs. Some representative members are:

yu-	'give'
punta-	'take away from'
karlirrmarda-	'retain a portion for him'

BI-verbs require that two NPs be cross-referenced by the pronominal clitics. The subject NP will be in ERGATIVE case and will be cross-referenced by one of the set of subject clitics. The non-subject clitics will cross-reference the DAT$_1$ NP in preference to the ABSOLUTIVE NP. All three of these NPs may be deleted within the clause, but all three are understood to be 'there'. BT-verbs correspond to what Lyons calls three-place verbs (Lyons 1971:350). Deleted ABSOLUTIVE NPs are normally interpreted as being either third person singular count nouns or as mass nouns, unless of course previous context indicates otherwise.

(25a)	*Wati-ngki*	*ka-Ø-rla*	*kuyu-Ø*	*yi-nyi*	*karnta-ku.*
	man-ERG	CAT-3sg-3sg	meat-ABS	give-NONPAST	woman-DAT$_1$

'The man is giving meat to the woman.'

BI-verbs can also accept a DAT$_2$ NP within the Outer Nucleus in addition to an ABSOLUTIVE NP and the normal DAT$_1$ NP within the Inner Nucleus. When this occurs, it is the DAT$_2$ NP which takes precedence in the cross-referencing over the other two syntactic non-subject NPs.

(26)	*Wati-ngki*	*ka-Ø-palangurla*	*marlu-Ø*	*kurdu-ku*
	man-ERG	CAT-3sg-3du	kangaroo-ABS	child-DAT$_1$
	marlaja	*yi-nyi*	*karnta-jarra-ku*	
	causative PV	give-NONPAST	woman-two-DAT$_2$	

'Because of the two women, the man is giving meat to the child.'

In example (25a) the application of the rule '-Ø Replacement' indicates the presence of a DAT$_1$ NP and in example (26) the further application of the rule '*-rla* Addition' signals the presence of a DAT$_2$ NP. This DAT$_2$ NP takes precedence over the other non-subject NPs in the clause with respect to the cross-referencing.

3. RANKING IN THE SELECTION OF PRONOMINAL CLITICS

In the previous section data has been presented which shows the various allowable combinations of syntactic NPs within Warlpiri clauses. In summary, the full range of combinations is indicated in chart 3.

CHART 3

Verb Classes and Possible Expansions of Syntactic NPs

SUBJECT	NON-SUBJECT			VERB CLASS	
ABS				-I-verbs	
ABS		DAT_1			- BI-verbs
ABS		DAT_1	DAT_2		
ERG		DAT_1		-M-verbs	
ERG		DAT_1	DAT_2		
ERG	ABS				- T-verbs
ERG	ABS	DAT_1		-BT-verbs	
ERG	ABS	DAT_1	DAT_2		
ERG			DAT_2		

In reference to the chart, it is important to note that with the NP combinations (as indicated by the brackets) appropriate to any of verb classes, the pronominal clitics will indicate the person and number of the left-most NP and the right-most NP. These clitics and the class of the verb will then indicate the numbers of other NPs, implied or overt, within the clause. The terms 'left-most' and 'right-most' are in reference only to the schematization in chart 3 and do not apply to any preferred word order in Warlpiri, which on the clause level is quite free. Rarely does one find overt in the clause every syntactic NP indicated by the pronominal clitics and the relevant verb class. In fact, all the syntactic NPs can be deleted without total loss of information.[8] Thus:

(27) *Marlaja-Ø-palangurla* *yu-ngu.*
causative PV-3sg-3du give-PAST

'Because of them (two), he/she gave it/them to him/her/them.'

The cross-referencing in (27) indicates the presence of an Outer Nucleus DAT$_2$ NP which, along with all the other syntactic NPs, has been deleted.

A quote from Jagst ([1972]:2; published in this volume) on the topic of deletions is appropriate:

> A marked tendency to communicate by making only the bare minimum of information explicit has been observed. This could be due to the prevalent practice of using much gesturing, 'finger talk' pantomime while talking. Another factor could be that much of the implicit information is usually already general knowledge or can be inferred from the surrounding circumstances. Warnayakas also firmly believe that when someone doesn't understand something that has been said, then let him use his mouth and ask, and implied information is then usually made explicit for him.

Again, whether or not a syntactic NP is deleted or overt within the clause, the pronominal clitic cross-referencing remains unchanged.

From charts 2 and 3, therefore, several observations can be made concerning the selection of the subject and non-subject pronominal clitics which cross-reference the syntactic cases.

Firstly, ERGATIVE NPs are always cross-referenced by Order 1 subject clitics.

Secondly, DATIVE NPs are cross-referenced solely by Order 2 non-subject clitics.

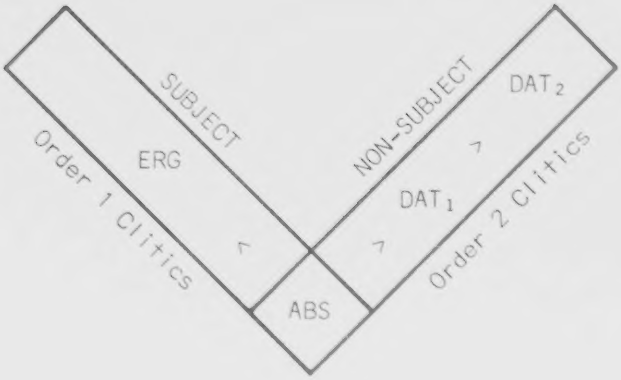
Thirdly, ABSOLUTIVE NPs can be cross-referenced by either Order 1 or Order 2 clitics only when certain conditions obtain. These conditions are as follows: ABSOLUTIVE NPs will be cross-referenced by Order 1 subject clitics if and only if an ERGATIVE NP is not present or implied within the clause, that is, with I-verbs and BI-verbs only. If an ERGATIVE NP is implied or present in the clause, with T-verbs, the ABSOLUTIVE NP will be cross-referenced by Order 2 non-subject clitics if and only if there is no DATIVE NP present or implied in the clause.

The last observation to be made is that DAT_1 NPs are always cross-referenced unless there is a DAT_2 NP present in the clause.

These observations are summed up in chart 4 which shows the relative ranking of the syntactic cases.

CHART 4

Ranking of Cases



Here 'x < y' means 'x takes precedence in the cross-referencing over y', and conversely, 'y is superseded in the cross-referencing by x.'[9]

4. COMPARISON WITH THE ANALYSIS OF WARLPIRI BY K. HALE

To date much has been written on the subject of clause and person marking in Warlpiri, most notably by Kenneth Hale. In his article 'Person Marking in Warlpiri' (1973), Hale presents a concise description of auxiliary (catalyst) positioning, subject person markers, and agreement between the auxiliary pronouns (pronominal clitics) and the syntactic cases within the clause. In section 7 he proceeds to talk about other clitic sequences which are affixed to the auxiliary model root to form, in my terminology, the catalyst complex.

Hale states 'that there is a constraint upon clitic sequences to the effect that a phonologically constituted direct object clitic cannot co-occur with a dative clitic' (1973:333-4). Note that his usage of 'direct object clitic' and 'dative clitic' corresponds to my usage of Order 2 pronominal clitics. Furthermore 'there is a constraint which would appear to limit clitic sequences to two members, subject-object' (p. 334). By speaking of direct object clitics and dative clitics, Hale implies that there are two independent systems operating, whereas I have earlier shown that a single system with ordered rules operates to cross-reference all non-subject syntactic NPs, namely the set of Order 2 clitics. This implication forces him to back away from his basic premise that there is a constraint which limits clitic sequences to two members, subject-object. It is my intended purpose here to strengthen Hale's second premise (i.e. clitic sequences are limited to two members) on the basis of my preceding analysis.

Specifically two problems exist with Hale's approach. Consider the following data: *(Note: All of Hale's data is presented phonemically. To avoid confusion I cite all of his data written orthographically to be consistent with my own data.)*

(28) (Hale's 59) *Ngajulu-rlu* *kapi-rna-ngku*
I-ERG CAT-1sg-2sg

karli-jarra-0 *punta-rni* *nyuntulu-ku.*
boomerang-two-ABS take away from-NONPAST you-DAT

'I will take the two boomerangs away from you.'

(29) *Ngajulu-rlu-rna-palangu* *karli-jarra-0*
1-ERG-1sg-2du boomerang-two-ABS

jarntu-rnu.
carve-PAST

'I carved the two boomerangs.'

In example (29) as well as in earlier discussion of T-verbs, we see that the ABSOLUTIVE NP *karli-jarra-0* 'boomerang-two-ABS' is unambiguously cross-referenced since no added DATIVE NP is involved. In example (28) we see, as predicted by the case ranking posited previously, that the ABSOLUTIVE NP is superseded since a further DATIVE NP, specifically DAT$_1$, is present. By examining the pronominal clitics alone it is not possible to tell whether a DATIVE NP or an ABSOLUTIVE NP is being cross-referenced. Such information is signalled primarily by the syntactic class of the verb. Systemically since there is no distinction between the way DAT$_1$ NPs and ABSOLUTIVE NPs are cross-referenced, except in third person singular, it is improper to speak of direct object clitics and dative clitics.

Hale's analysis results in a third column added to chart 1, and the entries in this third column are identical with those of the second column except for third person singular. In my view this constitutes an over-differentiated paradigm and is less preferable than the analysis which I have presented above.

Hale states 'Where the direct object is inanimate, apparently, a clitic may be suppressed, as in (59) [my (28)]; but where the direct object is animate, a phonologically constituted clitic may not be suppressed. This yields an irresolvable conflict in the case of certain sequences of the type presently under discussion, accounting for the ill-formedness of such strings as those in (60)' (1973:334).

To cite Hale's example:

(30)	(Hale's 60b)	*Ngarrka-ngku*	*kapi-0-ji*	*nyuntu-0*
		man-ERG	CAT-3sg-1sg	you-ABS

punta-rni	*ngaju-ku*
take away from-NONPAST	I-DAT

'The man will take you away from me.'

I believe Hale is incorrect in setting forth the criteria of animate versus inanimate as the explanatory principle involved. (In footnotes 1 and 22 of his paper, Hale alludes to the tentative nature of his conclusions.)

Having tested (30) with a number of Warlpiri speakers, I found it not only well-formed but quite acceptable although situationally unlikely. Therefore (30) represents a counter-example to Hale's claim that where the direct object is animate, a phonologically constituted clitic cannot be suppressed. In both (29) and (30) it is not a question of one of the putative object and dative clitic sequences being suppressed, because there is ro sequence of two non-subject clitics involved, but rather selection of one clitic according to the ranking of cases.

A further problem arises when Hale states that ' ... a sequence of subject followed by dative object may be further extended by the clitic /-rla/' (1973:335). He cites as an example:

(31)	(Hale's 64)	*Ngajulu-rlu*	*ka-rna-ngku-rla*	*karli-ki*
		I-ERG	CAT-1sg-2sg-3sg	boomerang-DAT

warri-rni	*nyuntu-ku*
seek-NONPAST	you-DAT

'I am looking for the boomerang for you.'

(Note that I am indicating morpheme breaks within the catalyst complex as Hale did, not as I would.)

Hale then makes the following statement followed by his example (65):

> These three-membered clitic sequences are also subject to a constraint: they must be of the form subject-dative-*la* [-*rla*]. Thus, one of the dative noun phrases in such a sentence must be of a form whose corresponding dative clitic is /-ḷa/ [-*rla*], that is, it must be third singular. It appears again, however, that an inanimate non-singular third person can be treated as if it were singular with respect to agreement in such cases. (1973:335)

(32) (Hale's 65)

Ngajulu-rlu	*ka-rna-ngku-rla*
I-ERG	CAT-1sg-2sg-3sg

karli-jarra-ku	*warri-rni*	*nyuntu-ku.*
boomerang-two-DAT	seek-NONPAST	you-DAT

'I am looking for the two boomerangs for you.'

(Note: Hale's morpheme breaks are cited.)

Hale says of the above example that 'a third person inanimate dative noun phrase in the dual, /karli-jarra-ku/ 'boomerang-dual-dative', normally requiring the clitic /-palangu/, is allowed to take the clitic /-rla/ instead'. He then proceeds to say that 'strings of the form shown in (66) are unacceptable'.

(33) (Hale's 66)

Ngarrka-ngku-lpa-0-ju-rla	*nyuntu-ku*
man-ERG-CAT-3sg-1sg-3sg	you-DAT

warru-rnu	*ngaju-ku*
seek-PAST	I-DAT

'The man was looking for you for me.'

(Note: Hale's morpheme breaks are cited.)

Hale states that this example (33) is unacceptable because 'the clitic /-rla/ cannot be construed with the second person dative noun phrase /nyuntu-ku/' (1973:336), but having tested (33) with a number of Warlpiri speakers, I found it to be quite acceptable. Hale's reason for asserting the unacceptability of (33) can only be that the cross-referencing clitic of animate objects cannot be suppressed where in fact in (33) the cross-referencing clitic for 'you' -*ngku* has obviously been suppressed in favor of -*rla*. (I am conceding Hale's argument at this point.) However, there is no need to posit either 'suppression' of a clitic in (33) or substitution of a clitic in (32), provided that only sequences of up to two cross-referencing clitics may obtain in any one clause. This has been shown to be a viable analysis in the preceding sections. The presence of -*rla* is due to the application of the '/-*rla*/ Addition' rule. Thus it is unnecessary to posit any principle based upon animatedness. This in turn strengthens Hale's original statement, concerning the limiting of clitic sequences to subject-object.

1. Warlpiri is spoken by about 3,000 people comprising two major subtribes, the Warnayaka and Ngaliya. Population centers are at Yuendumu, Lajamanu, Willowra Station and Warrabri, all on the fringes of the Tanami Desert area within the Northern Territory of Australia. Data for this paper was gathered primarily at Lajamanu among speakers of the Warnayaka dialect. No attempt has been made to distinguish or account for any dialect differences which may exist.

   My main sources of language data have been Mr Ned Jampijinpa, Mr Jerry Jangala and Mr Paddy Jangala, and to all of them I offer very special thanks.

   I would also like to thank Mary Laughren, Northern Territory Department of Education linguist at Yuendumu, for her advice and helpfulness in supplying additional data and ideas. Thanks also to Bruce Waters, SIL linguist at Ramangining, who has consulted with me during the formulation of my ideas.

2. Clause-initial free pronouns are optionally marked for case. Clause-final free pronouns are obligatorily marked.

3. Several systems operate to neutralize number distinctions in the pronominal clitics. Basically these result in dual syntactic nominals being manifested by plural clitics. Thus the ambiguity concerning number in example (2).

4. PURPOSIVE case is also marked by the DATIVE case suffix *-ku* but is clearly distinct from it by virtue of its inability to be cross-referenced.

5. Simple past tense is marked by the absence of a catalyst, in which instance all pronominal clitics attach to the first word in the clause.

6. No attempt has been made to further sub-categorize verbs on the basis of whether they can or cannot accept and cross-reference a second DATIVE NP.

7. Some T-verbs such as *kanginypu-* fail to recognize' and *kanginypurda nya-* 'mis-hear', carry within themselves frustrated aspect. However these take ABSOLUTIVE NP non-subjects as do all other T-verbs.

8. I expect that rules governing deletions and clause word order will be discovered when text grammar is studied.

9. The symbolism is that used by David E. Johnson in his article 'On Relational Constraints on Grammar' (Johnson 1978:156). No attempt has been made here regarding possible application of my analysis to theoretical work in Relational Grammar as it is being developed by Comrie, Keenan, Morgan, Perlmutter, Postal, Ross and others.

APPENDIX 1

WARLPIRI ORTHOGRAPHY

	apico-alveolar	apico-post alveolar	lamino-alveo-palatal	bilabial	dorso-velar
stops	t	rt	j	p	k
nasals	n	rn	ny	m	ng
laterals	l	rl	ly		
semi-vowels	y	r		w	
rhotics	rr	rd			
vowels	i	u	a		

Following is a list of abbreviations used in all language glosses:

ABS	absolutive case
DAT_1	dative 1 case
DAT_2	dative 2 case
PUR	purposive case
ERG	ergative case
COM	comitative case
CAT	catalyst
PV	preverb
PAST	past tense inflection
NONPAST	present tense inflection

APPENDIX 1 - (continued)

TP	topicalizer
1	first person
2	second person
3	third person
sg	singular
du	dual
pl	plural
inc	inclusive
exc	exclusive

APPENDIX 2

Following are three oral texts and a vocabulary listing all the words found therein. In addition to the abbreviations used in the main body of this paper are the following:

PER	perlative case
ALL	allative case
INS	instrumental case
PUR	purposive case
PRO	progressive aspect
IMP	imperative mood
INF	infinitive

TEXT 1

'THE FIRESAW'

- Jerry Jangala

1.

Yimi-∅	*yi-rna*	*wita-∅*	*wangka-∅,*	*yirra-rni*
story-ABS	CAT-1sg	little-ABS	say-NONPAST	put-NONPAST

nyampu-rla	*wirlinyi-warnu-∅.*
here-LOC	hunting-from-ABS

I want to say, put a little story here about hunting.

2.

Ya-nu-rnalu	*nyampu-ngurlu-ju*	*marru-ngurlu.*
go-PAST-1plex	here-ABL-TP	house-ABL

We (exc.) went from this house.

3.

Karlarra-rnalu	*ya-nu*	*yiwarra-wana*	*mutika-kurlu,*
west-1plex	go-PAST	road-PER	car-COM

ngajulu-∅,	*Jampijinpa-jarra-∅,*	*Napangardi-∅*
I-ABS	skin group-two-ABS	skin group-ABS

Nungarrayi-∅,	*kurdukurdu-∅.*
skin group-ABS	children-ABS

We went west along the road with a car; myself, the two Jampijinpas, Napangardi, Nungarrayi, and the children.

4.

Ya-nu-rnalu	*karlarra...*
go-PAST-1plex	west

We went west...

5.

Yirdiyi-∅	*yangka-∅*	*kuja*	*ka-∅*
road-ABS	aforementioned-ABS	that	CAT-3sg

nguna-mi-rra	*Yurnturmu-kurra*	*manu*	*Nangkurdu-kurra.*
lie-NONPAST-thither	Yuendumu-ALL	and	Nangkurdu Lake-ALL

That is the road which lies toward Yuendumu and Nangkurdu Lake.

6. *Ngula-rnalu* *ya-nu* *Wiyala-kurra.*
relator-Iplex go-PAST Wiyala-ALL

Then we (exc.) went towards Wiyala.

7. *Ngula-rnalu* *jupu karri-ja* *yali-rla-juku.*
relator-Iplex stop-PAST there-LOC-still.

Then we (exc.) stopped right there.

8. *Yama-ngka-lpa-rnalu* *nyina-ja.*
shade-LOC-CAT-Iplex sit-PAST

We (exc.) were sitting in the shade.

9. *Jitijiti-ja-rnalu* *mutika-ngurlu.*
dismount-PAST-Iplex car-ABL

We dismounted from the car.

10. *Jurnarrpa-lku-rnalu* *ma-nu* *miyi-0* *kapi* *ngapa-0.*
belongings-then-Iplex get-PAST food-ABS and water-ABS

Then we (excl.) got our things, the food and water.

11. *Ya-nu-rnalu* *yama-kurra.*
go-PAST-Iplex shade-ALL

We went towards the shade.

12. *Japu-rnu-rna-palangu* *Jampijinpa-jarra-0,*
ask-PAST-1sg-2du skin group-two-ABS

I asked the two Jampijinpas,

> *'Matches-ji* *ka-npala* *marda-rni* *palka-0?'*
> matches-TP CAT-2du have-NONPAST present-0
>
> 'Do you two have matches on hand?'

13. *Jampijinpa-kari-0-ji* *wangka-ja,* *'Lawa'.*
skin group-other-ABS-TP say-PAST no

The other Jampijinpa said, 'No'.

14. *Jinta-kari-Ø-lki-ji* *wangka-ja,* *'Lawa,* *matches-wangu'.*
one-other-ABS-then-TP say-PAST no matches-without

Then the other one said, 'No, (we're) without matches'.

15. *Ngaju-rna* *wangka-ja* *'Kala* *nyarrpa* *ma-ni-rlipa*
I-1sg say-PAST and what/how do-NONPAST-1plinc

nyampu-Ø-ju *nalija-Ø?'*
this-ABS-TP tea-ABS

I said, 'And how will we make this tea?'

16. *Jinta-kari-Ø-ji* *wangka-ja* *Jampijinpa-kari-Ø,*
one-other-ABS-TP say-PAST skin group-other-ABS

'Jimanypa-Ø-rlipa-Ø *ngurrju ma-ni'.*
firesaw-ABS-1plinc-3sg make-NONPAST

The other Jampijinpa said, 'Let's make a firesaw'.

17. *Ngaju-rna* *wangka-ja,* *'Yuwayi,* *ngulajuku!'*
I-1sg say-PAST yes OK

I said, 'Yes, OK!'

18. *Ya-nu-rna.*
go-PAST-1sg

I went.

19. *Watiya-Ø-rna* *paka-rnu* *mayingka-kurlu-rlu*
tree-ABS-1sg strike-PAST axe-COM-INS

linji-jarra-Ø *jirrama-Ø.*
dry-two-ABS two-ABS

I cut wood with an axe, two dry pieces.

20. *Ka-ngu-rna* *pina* *yama-kurra*
carry-PAST-1sg back shade-ALL

I carried it back to the shade.

21. *Jungajuku* *yirra-rnu-rna-rla* *marna-∅*
straightway put-PAST-1sg-3sg grass-ABS

yardijardiji-∅ *ngulajangka-ju*
dry seed (species)-ABS after that-TP

puluku-kurlangu-∅-lku *kuna-∅.*
cow-possessive-ABS-then dung-ABS

Straightway I put grass and dry seeds into it, and after that then cow dung.

22. *Jungajuku-rlujarra-∅* *rduyulu-ngu* *jimanypa-∅-lku.*
straightway-1duexc-3sg make a smoky fire-PAST firesaw-ABS-then

Straightway we two (exc) made the firesaw smoke.

23. *Luwa-rnu-rlujarra-∅.*
saw-PAST-1duexc-3sg

We sawed (literally shot) it.

24. *Lawa-wiyi* *kamparru-warnu-ju.*
nothing-first first-from-TP

There was nothing from that first effort.

25. *Ngulajangka-ji* *jinta-kari-∅-lki-rlijarra-∅* *yarda*
after that-TP one-other-ABS-then-1duexc-3g again

luwa-rnu.
saw-PAST

After that then we sawed again at it.

26. *Palka-∅-lku-rlujarra-∅* *luwa-rnu* *jimanypa-∅-ji*
present-ABS-then-1duexc-3sg saw-PAST firesaw-ABS-TP

Jampijinpa-rlu.
skin group-ERG

We two (exc) then successfully sawed the firesaw, Jampijinpa (and I) did.

27. *Jungajuku* *rduyulu-ngu-rnalu-∅* *jimanypa-*
straightway make a smoky fire-PAST-1plexc-3sg firesaw

27. (cont.) *jangka-lku* *warlu-∅-ju* *ngurrju-nyayirni-∅.*
CAU-then fire-ABS-TP good-very-ABS

Straightway then we (exc.) made a really good fire from the firesaw.

28. *Ngula-rnalu-nyanu* *nalija-∅-lku* *purra-ja.*
relator-Iplexc-ref tea-ABS-then cook-PAST

Then we (exc.) cooked tea for ourselves.

29. *Ngula-rna-jana* *ngaju-∅-ju* *wirlinyi-∅-lki.*
relator-1sg-3pl I-ABS-TP hunting-ABS-then
jurnta *ya-nu*
go away from-PAST

Then I went hunting away from them.

30. *Purdangirli-lpa-lu-∅* *purra-ja.*
behind-CAT-3pl-3sg cook-PAST

Behind they were cooking it (lunch).

31. *Nga-rnu-lu-∅.*
eat-PAST-3pl-3sg

They ate it.

32. *Mirntangali-ji-li-∅* *nga-rnu* *nyanungu-rlu-ju.*
noon-TP-3pl-3sg eat-PAST they-ERG-TP

At noon they ate it.

33. *Ngaka-lku-rna* *ngaju-∅* *ya-nu-rnu* *karli-*
later-then-1sg I-ABS go-PAST-hither boomerang
kirli-∅ *jinta-kurlu-∅* *paka-rninjarla.*
COM-ABS one-COM-ABS hit-sequential

Later then I returned with one boomerang, having chopped it.

34. *Nyarrpa-rna-∅* *kuja* *ngula-ji* *ngurrju ma-nu.*
how-1sg-3sg thus relator-TP make-PAST

How is it then I made it/did thus?

35. *Kala-rna-∅* *nya-ngu* *ngaju-ku-palangu.*
CAT-1sg-3sg see-PAST I-DATIVE-ascending kinsman

I used to see my father.

36. *Kala-∅-∅* *jimanypa-∅* *luwa-rnu.*
CAT-3sg-3sg firesaw-ABS saw-PAST

He used to saw the firesaw.

37. *Kala-∅-∅* *ngurrju ma-nu* *kuja-piya-rlu.*
CAT-3sg-3sg make-PAST thus-like-ERG

Just like that he used to make it.

38. *Ngulajangka-rlu* *pina-ngku-lku-rna-∅* *luwa-rnu.*
because of that-ERG wise-ERG-than-1sg-3sg saw-PAST

Because of that I now know (how to) saw one.

39. *Ngulajuku-rna-∅* *nyampu-∅-ju* *wita-∅* *jaru-∅-ju*
finish-1sg-3sg this-ABS-TP little-ABS word-ABS-TP
yirri pura-ja.
tell-PAST

I am finished following (telling) this little story.

TEXT 2

'CHRISTIAN DANCES'

- Ned Jampijinpa

1. *Nyampu-rla ka-rlipa-jana marda-rni*
here-LOC CAT-1plinc-3pl have-NONPAST

mardukuja-∅ manu wati-∅ ngula
woman-ABS and man-ABS relator

ka-lu-∅ pi-nyi purlapa-∅ manu
CAT-3pl-3sg strike-NONPAST ceremony-ABS and

yawulyu-∅ wapirra-kurlangu-∅
woman's business-ABS rather-possessive-ABS

Here we (inc.) have men and women who dance (literally strike) public ceremonies and women's business belonging to God (Father).

2. *Mardukuja-rlu ngula ka-lu-∅ yunpa-rni*
woman-ERG relator CAT-3pl-3sg sing-NONPAST

manu pi-nyi yawulyu-∅ ngurrju-∅
and strike-NONPAST woman's business-ABS good-ABS

manu wati-ngki ngula ka-lu-nyanu
and man-ERG relator CAT-3pl-ref

yirra-rni kuruwarri-∅ wapirra-kurlangu-∅
put-NONPAST sacred designs-ABS father-possessive-ABS

ngurrju-∅
good-ABS

As for the women, they sing and dance good women's business, and as for the men, they put sacred designs belonging to God on themselves.

3. *Yapa-ngku, ngula ka-lu-jana nya-nyi*
people-ERG relator CAT-3pl-3pl see-NONPAST

purlapa-kurra.
public ceremony-ALL

As for the people, they see them (as they dance) the public ceremony.

4. *Wuraji manu munga-ngka ya-ni-rni ka-lu.*
evening and night-LOC go-NONPAST-hither CAT-3pl

Evening and all night they come there.

5. *Purda nya-nyi* *ka-lu-∅* *wapirra-kurlangu-∅*
hear-NONPAST CAT-3pl-3sg father-possessive-ABS

yimi-∅ *ngurrju-∅.*
story-ABS good-ABS

They hear God's good story.

TEXT 3

'THE CROW AND THE BOY'

- Jerry Jangala

1. *Jinta-ngka* *kirri-ngka* *kuja-lpa-lu* *nyina-ja*
one-LOC camp-LOC relator-CAT-3pl sit-PAST
jukurrpa-0.
dreaming-ABS

There was one camp where the dreamings lived.

2. *Ngula-lu-rla* *jaalyma-nu* *kurdu-ku* *marlurlu-ku,*
relator-3pl-3sg whisper-PAST child-DAT$_1$ initiate-DAT$_1$
ngati-nyanu-0, *kirda-nyanu-0,* *pimirdi-nyanu-0*
mother-ref-ABS father-ref-ABS mother's sisters-ref-ABS
jamirdi-nyanu-0.
father's, sister's sons-ref-ABS.

They were plotting and planning for the young boy initiate, that is, his mothers, fathers, aunties, and cousins were.

3. *Ngarru-rnu-lu-jana* *juka-patu-rlu-ju.*
tell-PAST-3pl-3pl guardians-pl-ERG-TP

The guardians told them.

4. *Wangka-ja-lu-jana* *juka-patu-ju* *ngula-ku-ju,*
say-PAST-3pl-3pl guardians-pl-TP relator-DAT-TP

The guardians talked to them concerning him.

'Karinganta *yi-rnalu-0* *nyampu-0-ju* *ngarrka-0*
declarative CAT-1plexc-3sg this-ABS-TP man-ABS
kiji-rni.'
throw-NONPAST.

'It is certainly our intention to initiate (literally "throw") this man.'

5. *Jungajuku* *turnu jarri-ja-lu-rla.*
straightway gather-PAST-3pl-3sg

Straightway they gathered around him.

6. *Turnu jarri-ja-lu* *'marnakurra warnukurra'.*
gather-PAST-3pl name of ceremony

They gathered together for the ceremony.

7. *Ngula-lpa-lu-nyanu* *wangka-ja* *juka-patu-Ø-ju,*
relator-CAT-3pl-ref say-PAST guardian-pl-ABS-TP

Then the guardians said to each other,

'Nyampu-rla-juku-nya-rlipa-Ø *marda-rni* *yantarli-jiki.'*
here-LOC-still-query-1plinc-3sg hold-NONPAST nearby-still

'Should we hold him right here nearby?'

'Paka-rni-rlipa-Ø *kurdiji-rli-ji?'*
strike-NONPAST-1plinc-3sg shield-ERG-TP

'Should we dance the kurdiji ceremony?'

8. *Wangka-ja-lu-nyanu* *panu-kari-Ø-ji* *juka-patu-Ø-ju,*
say-PAST-3pl-ref many-other-ABS-TP guardian-pl-ABS-TP

Many other of the guardians said to each other,

'Karinganta-rlipa-Ø *yilya-Ø* *jakurdukurdu-Ø,*
declarative-1plinc-3sg send-NONPAST initiation tour-ABS
yinga-Ø-jana *yapa-Ø* *warru* *turnu ma-ni*
CAT-3sg-3pl people-ABS around gather (T-verb)-NONPAST
ngarrka-Ø.'
man-ABS

'We should certainly send him on his initiation tour so that he can gather together men from all around.'

9. *Jungajuku* *kaarnka-Ø-ji-Ø-jana* *wangka-ja,*
straightway crow-ABS-TP-3sg-3pl say-PAST

'Yuwayi, *ngajulu-rlu* *ka-rna-Ø* *ka-nyi*
yes I-ERG CAT-1sg-3sg take-NONPAST
jarrawarnu-rlu-ju.'
guardian-ERG-TP

Straightway crow said to them,'Yes, I'm the guardian taking him.'

10. *Jungajuku-lu-Ø* *mapa-rnu* *jara-ngku* *yurlpa-ngku.*
straightway-3pl-3sg rub-PAST fat-INS ochre-INS

Straightway they rubbed him with fat and ochre.

11. *Yilya-ja-lu-palangu.*
send-PAST-3pl-3du

They sent those two.

12.

Jirrnganja-∅-rla	*ya-nu*	*kaarnka*	*papardi-nyanu-∅*
'having' PV-3sg-3sg	go-PAST	crow-ABS	older brother-ref-ABS

kurdu-ku-ju	*marlurlu-ku.*
child-DAT$_1$	initiate-DAT$_1$

Having the young male initiate in his company, the crow, his older brother, went.

13.

Jirrnganja-∅-rla	*ya-ninja*	*ya-nu.*
'having' PV-3sg-3sg	go-INF	go-PAST

Having him in his company, he kept on going and going.

14.

Kulkurru-pala	*nguna-ja-rra.*
halfway-3du	lie-PAST-thither

They (2) camped halfway.

15.

Ya-nu-pala	*mungalyurru-kari-∅-lki.*
go-PAST-3du	morning-other-ABS-then.

Then they (2) went the next morning.

16.

Ngula-∅-rla	*ngapa-∅-ji*	*ngayi*	*parlu pu-ngu*
relator-3sg-3sg	water-ABS-TP	'benefactive' PV	find-PAST

mulju-∅-ju.
soak-ABS-TP

Then he found some soak water for him.

17.

Ngula-∅-rla	*mulju-ku-ju*	*karla-ja.*
relator-3sg-3sg	soak-DAT$_1$-TP	dig-for-PAST

He dug for water.

18.

Wita-ngka-rra-∅-rla	*karla-ja.*
little-LOC-thither-3sg-3sg	dig for-PAST

In a little hole he dug for it.

19.

Ngapa-∅-ji-∅-∅	*palka ma-nu*	*kankarlarra-ngurlu-juku*
water-ABS-TP-3sg-3sg	expose-PAST	along the topside-ABL-still

yangka-∅	*lurlju-ngurlu*	*manu*	*parduna-rla-juku.*
aforementioned-ABS	hill-ABL	and	dry-LOC-still

From along the top side of that same dry hill he exposed water.

20.

Wita-ngka-rra-∅-∅	*kaninjarra*	*karla-ja.*
little-LOC-thither-3sg-3sg	downward	dig-for-PAST

He dug downwards in that little (soak).

21.

Palka ma-nu-∅-∅.
expose-PAST-3sg-3sg

He exposed it.

22. *Nga-rnu-∅-∅* *ngapa-∅-ji* *wiri-ngki-wiyi.*
drink-PAST-3sg-3sg water-ABS-TP big-ERG-first

The big one drank water first.

23. *Kurdu-purdimpa-∅-lku-∅* *ya-nu-rnu.*
child-diminutive-ABS-then-3sg go-PAST-hither

Then the little fellow came up.

24. *Ngula-lku-∅* *yuka-ja* *kaninjarra*
relator-then-3sg enter-PAST downwards

Then he descended into it (the soak).

25. *Nga-rninjunu* *ngapa-∅-ju*
drink-PAST PRO water-ABS-TP

He went drinking water.

26. *Nguna-ja-pala.*
lie-PAST-3du

They (2) camped.

27. *Yarda-pala* *yarnka-ja* *mungalyurru-kari-∅-lki.*
again-3du set off-PAST morning-other-ABS-then

Again they (2) set off then the next morning.

28. *Ya-nu-pala...*
go-PAST-3du

They (2) kept on going.

29. *Kulkurru kulkurru-juku-∅-palangu* *mirntangalijarri-ja.*
halfway-still-3sg-3du become morning-PAST

Halfway, morning broke on those two.

30. *Ngula-∅-∅* *yampi-ja-rra* *kurdu-∅-ju* *yama-ngka.*
relator-3sg-3sg leave-PAST-thither child-ABS-TP shade-LOC

He left the child in the shade.

31. *Nyanungu-∅-lku-∅* *ya-nu* *muℓju-kurra.*
he-ABS-then-3sg go-PAST soak-ALL

Then he (emphatic) went to the soak.

32. *Mulju-∅-ju* *jungajuku* *pangu-rnu* *pangu-rnu* *pangu-rnu.*
soak-ABS-TP straightway dig-PAST dig-PAST dig-PAST

Straightway he dug and dug and dug the soakage.

33. *Palka ma-nu-ø-ø* *ngapa-ø-ji.*
expose-PAST-3sg-3sg water-ABS-TP

He exposed the water.

34. *Yangka-piya-ø-yijala* *wita-ngka-rra* *karla-ja.*
aforementioned-like-ABS-also little-LOC-thither dig for-PAST

Just like in that other little soak, he dug for it.

35. *Nga-rnu-ø-ø* *wiri-ngki-wiyi*
drink-PAST-3sg-3sg big-ERG-first

The big one drank first.

36. *Yangka* *yali-ø* *kurdu-ø* *yama-jangka-lpa-ø*
aforementioned that-ABS child-ABS shade-LOC-CAT-3sg

ya-nu *purdangirli-warnu-ø*
go-past behind-from-ABS

That previously mentioned boy was coming from behind from the shade.

37. *Ya-nu-rnu-ø*
go-PAST-hither-3sg

He came up.

38. *Wangka-ja-ø-rla,* *'Ngapa-ø* *palka-ø.* *Yalumpu-ø*
say-PAST-3sg-3sg water-ABS present-ABS that(closeby)-ABS

kaninjarra *nga-nja.'*
downward, deep drink-IMP

He (crow) said to him, 'There's water here. Drink it down below.'

39. *Jungajuku* *kurdu-pardu-ø* *jiti-ja.*
straightway child-diminutive-ABS descend-PAST

Immediately the little boy went down.

40. Marlurlu-ø*(sic)* *ngapa-ø* *nga-rninjunu.*
initiate-ABS water-ABS go and drink-PASTPRO

The initiate went down and drank water.

41. *Ngula-lpa-ø* *pina-lku* *warrka-rninja* *ya-nu*
relator-CAT-3sg back-then climb-INF go-PAST

kankarlarra-kari *lurlju-kurra.*
up-other hill-ALL

Then he climbed back upwards and went towards the hill.

42. *Nyanungu-rlu-∅-∅* *yarrirni parnka-ja* *yama-ngurlu.*
he-ERG-3sg-3sg attack-PAST shade-ABL
(emphatic)

He attacked him from the shade.

43. *Yalumpu-rlu-juku-∅-∅* *paka-rnu.*
that-ERG-still-3sg-3sg hit-PAST.

That one struck him dead.

44. *Kakarda-∅-∅-∅* *rdungkurrpaka-rnu.*
nape of neck-ABS-3sg-3sg smash-PAST

He smashed him in the nape of his neck.

45. *Yama-kurra-∅-nyanu* *ka-ngu*
shade-ALL-3sg-ref carry-PAST

He carried him to the shade for himself.

46. *Purra-ja-∅-nyanu* *kuyu-∅-lku.*
cook-PAST-3sg-ref meat-ABS-then

Then he cooked the meat for himself.

47. *Ngula-∅-∅* *nga-rnu* *yalumpu-rlu-juku.*
relator-3sg-3sg eat-PAST that-ERG-still

That one certainly ate it.

48. *Kuyu-∅-lku-lpa-∅-∅* *nga-rnu.*
meat-ABS-then-CAT-3sg-3sg eat-PAST

Then he was eating the meat.

49. *Jara-∅-ji-lpa-∅-∅* *palka-∅-juku* *marda-rnu*
fat-ABS-TP-CAT-3sg-3sg present-ABS-still have hold-PAST

wita-kari-∅-ji.
little-other-ABS-TP

He still had present a little bit of the fat.

50. *Ngula-ngurlu-ju-lpa-∅-∅* *palka-kurlu-juku* *warru*
relator-ABL-TP-CAT-3sg-3sg present-COM-still around

yungku-rnu *warlu-∅-ju* *kuja-purda* *kuja-purda.*
light-PAST fire-ABS-TP thus-toward thus-toward

From there still having that bit (of fat) he was lighting fires all around this way and that.

51. *Yungku-rnu-0-0* *warru.*
light-PAST-3sg-3sg around

He lit them around.

52. *Kulanganta-lpa-0-rla* *yijardu-kurla*
counterfactual-CAT-3sg-3sg true-certainly

jirrnganja *rdiji ka-ngu-rra*
'having' PV set line of fires-PAST-thither

kuja-purda-rlu.
thus-towards-ERG

It certainly wasn't true that he, having (that little bit of fat), was just going along setting fires away from them.

53. *Kala* *lawa-ngka!*
but no-LOC

But no, not for that reason!

54. *Yimirru-ngu-lpa-0-jana* *yangka*
trick-PAST-CAT-3sg-3pl aforementioned

purdangirli *juka-ɽatu-0*
behind guardians-pl-ABS

He was tricking those previously mentioned guardians behind.

55. *Yarnka-ja-0* *pina* *nyanungu-kari-0-lki.*
set off-PAST-3sg back he-other-ABS-then

Then he (emphatic) set off back.

56. *Jara-0-lpa-0-0* *wita-0* *marda-rnu* *langa-ngka*
fat-ABS-CAT-3sg-3sg little-ABS have hold-PAST ear-LOC

He was holding a little bit of fat (behind) his ear.

57. *Pina-0* *ya-nu*
back-3sg go-PAST

He went back.

58. *Kulanganta* *kaji-0-jana* *yu-ngu* *yapa-kari*
counterfactual CAT-3sg-3pl give-PAST people-other

ki-lki.
DAT_1-then.

It wasn't as if he gave him to other people then.

59. *Kulanganta* *kaji-li-ø* *yapa-kari-rli-lki*
counterfactual CAT-3pl-3sg people-other-ERG-then

ka-ngu.
take-carry-PAST

It wasn't as if other people had taken him then.

60. *Ya-nu-ø* *pina* *jurrku-kurra.*
go-PAST-3sg back same place-ALL

He went back to the same camp.

61. *Ngula-lpa-ø* *yangka* *pina-rni* *purla-nja*
relator-CAT-3sg aforementioned back-hither yell/cry-INF

ya-nu.
go-PAST

He, the previously mentioned (crow) one, was going along yelling.

62. *Purla-nja-rra-ø* *ya-nu.*
cry-INF-thither-3sg go-PAST

He went along yelling.

63. *Jungajuku-ℓu* *turnujarri-ja*
straight-3pl gather-PAST

Straightway they gathered together.

64. *Kulanganta-ø* *panu-ku-kurla* *yapa-ku*
counterfactual-3sg many-PUR-still people-PUR

warru *parnkaja.*
around run-PAST

It's not true he was running all around to get that mob of people.

65. *Nganta-lpa-ø* *kuja-purda-kari* *karri-ja-rra.*
reportative-CAT-3sg thus-towards-other stand-PAST-thither

He was supposedly standing the other way.

66. *Nya-ngu-lu-ø.*
see-PAST-3pl-3sg

They saw him.

67. *'Kari* *kuja* *nyampu-ø-ju* *jinta-ø!'*
only thus this-ABS-TP one-ABS

'Hey, there's only one!'

68. *Jinta-∅* *nya-ngu-lku-waja-lu-∅.*
one-ABS see-PAST-then-reported speech-3pl-3sg.

Reportedly then they saw but one.

69. *Ngula-lpa-lu-∅* *japu-rnu-lpa-lu-∅,*
relator-CAT-3pl-3sg ask-PAST-CAT-3pl-3sg

They were asking him.

'*Nyarrpara* *kaℓa* kuja kurdu-∅-ju?'
where and thus child-ABS-TP

'And where is the child?'

70. '*Yinya* *kuja-lu-∅* *ka-nganya-rra* *murnma-juku*
there relator-3pl-3sg carry-NONPAST-hither yet-still
PRESENTATIONAL

kuja-purda-juku.
thus-towards-still

'It's over there that they are now still taking him away that way.'

Kala-rna *wuukayi-∅-lki* *pina* *ya-nu.*
and-1sg tired-ABS-then back go-PAST

'But I then came back all tired out.'

71. *Nya-ngu-lpa-lu-∅*
see-PAST-CAT-3pl-3sg

They were watching him.

72. *Miyimiyi nya-ngu* *ngari-lpa-lu-∅.*
examine-PAST only-CAT-3pl-3sg

They were only examining him closely.

73. *Jungajuku* *yama-kurra* *ya-nu-rra*
straightway shade-ALL go-PAST-thither

So he went away towards the shade.

74. *Wurra-ngku-lu-∅* *yampi-ja* *ngarrurda-wangu-rlu.*
yet-ERG-3pl-esg leave-PAST fear -without-ERG

Without fear they left him yet for a while.

75. *Miyimiyi* *nya-ngu-lpa-lu-∅,* *manu* *parnta nya-ngu-ℓu-rla*
scrutinize-PAST-CAT-3pl-3sg and smell-PAST-3pl-3sg

jara-∅-ji *yali-∅*
fat-ABS-TP that-ABS

They were scrutinizing him, and they smelled that fat on him.

76. *'Nyampu-∅, nyampu-∅-∅-∅-juku paka-rnu.*
this-ABS this-ABS-3sg-3sg-certainly hit-PAST

'This, this one certainly killed him

Lawa-ngka ka-∅-ngalpa nyampu-rlu-ju yimirri-nyi
nothing-LOC CAT-3sg-1plinc this-ERG-TP trick-NONPAST

For no reason at all this one is tricking us.'

Paka-rninja-rla-∅-∅ nga-rnu nyanungu-rlu
hit-INF-sequence-3sg-3sg eat-PAST he-ERG

kuyu-∅-lku.'
meat-ABS-then

After killing him, he (emphatic) then ate him as meat.'

77. *Nyina-ja-lpa-∅ yama-ngka-ji.*
sit-PAST-CAT-3sg shade-LOC-TP

He was sitting in the shade.

78. *Yangka-∅-lpa-lu yali-∅ yapa-kari-∅*
aforementioned-ABS-CAT-3pl that-ABS people-other-ABS

pinapina ya-nu, manu-lpa-lu-∅ pu-ngu-lu-∅
comeback-PAST and-CAT-3pl-3sg dance-PAST-3pl-3sg

yalumpu-rla-juku 'marnakurra warnukurra'-rla-rlu.
that-LOC-still name of ceremony-LOC-ERG

Those aforementioned other people all went back, and they danced the ceremony at the ceremonial place.

79. *Pu-ngu-lu-∅ pu-ngu-lu-∅ pu-ngu-lu-∅*
dance-PAST-3pl-3sg dance-PAST-3pl-3sg dance-PAST-3pl-3sg

They danced and danced and danced it.

80. *Pwarrilpa-lpa-lu-∅ pu-ngu*
body painting-CAT-3pl-3sg do-PAST

nyanungu-nyangu-rlu-lku yapa-ngku.
he-possessive-ERG-then people-ERG

Then they, his people did the body painting.

81. *Yirra-rnu-lu-∅*
put-PAST-3pl-3sg

They put it there.

82. *Ngula-ku-lku-lu-rla,* *wirrpiyi-ji-lpa-lu-rla*
relator-PUR-then-3pl-3sg 'entrap' PV-TP-CAT-3pl-3sg

parnka-ja.
run-PAST

Then for that, they ran over to entrap him.

83. *Yaja-rninja* *parnka-ja-lpa-lu-∅*
enlise-INF run-PAST-CAT-3pl-3sg

They were running there enlisting him.

84. *Puta-lpa-lu-∅* *yaja-rninja* *parnka-ja.*
try-CAT-3pl-3sg enlist-INF run-PAST

They tried unsuccessfully running over and enlisting him.

85. *Wangka-ja-lpa-lu-rla,* *'Yinya-waja-npa* *kuja*
say-PAST-CAT-3pl-3sg over there-reportedly-2sg relator

kirda-puraji-kirlangu, *yi-npa* *nya-nyi*
father-your-possessive CAT-2sg see-NONPAST

puwarriℓpa-∅.'
body painting-ABS

They were saying to him, 'Your father reportedly (wants) you over there so that you can see his painting.'

86. *Ngula-lpa-∅* *nyanungu-∅-ju* *wangka-ja,* *'Pina*
relator-CAT-3sg he-ABS-TP say-PAST wise

ka-rna *nyina* *nya-nja-warnu-kari-∅'*
CAT-1sg sit see-INF-from-other-ABS

Then he (emphatic) said, 'I already know that one, having seen it another time.'

Nyampu-∅-ja-rna *wirriji-∅-lki* *luwa-rni*
this-ABS-emphatic-1sg hairstring-ABS-how spin-NONPAST

nyampu-rla-juku.
here-LOC-still

'Now I'm just going to spin this hairstring right here.'

87. *Lawa-juku* *puta-lu-∅* *yaja-rnu*
nothing-still try-3pl-3sg enlist-PAST

They still couldn't enlist him.

88. *Ngaka-lpa-lu-rla* *yarri-rni* *ya-nu*
later-CAT-3pl-3sg hostile-PV-hither go-PAST

jirrama-kari-∅   *nyanungu-ku-lku*   *jimarri-nyanu.*
two-other-ABS   he-DAT-then   circumcisors-ref

Later then two other of his circumcisors approached him threateningly.

89. *Yaja-rnu-pala-∅*
enlist-PAST-2du-3sg

They enlisted him.

90. *Wangka-ja-pala-rla.*
say-PAST-2du-3sg

They were talking to him.

91. *Wunguma-ninja-ku-wiyi*   *yinga-∅-∅*   *yarriki-nyanu*
see/look-INF-PUR-first   CAT-3sg-3sg   father-ref

wirrpiyi   *yirra-rnu-rnu*   *puwarrilpa-∅*   *kuja*
'entrap' PV   put-PAST-hither   body painting-ABS   thus

yinya.
there.

It was only to look at first that his father put (to entrap) that body painting there.

92. *Ngaka-∅-rla*   *ngula-ku*   *yaḻya jarri-ja*
later-3sg-3sg   relator-PUR   decide-PAST

jimarri-nyanu-ku.
circumcisor-ref-DAT$_1$

For that reason later he decided (in favor of) his circumcisors.

93. *Wangka-ja-∅-paḻangu,*   *'Ngari ka-rna*   *kuja*
say-PAST-3sg-3du   only CAT-1sg   thus

parlpa-∅   *kuja-∅-rla*   *rdanpa-rni.*
circumcisee-ABS   relator-3sg-3sg   accompany-NONPAST

He said to those two,'I the circumcisee will only accompany him (my circumcisor).

Kala   *kulalpa-rna-∅*   *ya-ntarla*   *panu-kari-ki-ji.'*
but   CAT-1sg   go-IRREALIS   many-other-PUR-TP

But I can't/won't go for anyone else.'

94. *Jungajuku*   *ya-nu-rnu.*
straightway   go-PAST-hither

Straightway he came up.

95. *Kulkurru-jarra-ø-lu-ø* *kutu-juku* *yirra-rnu*
halfway-two-ABS-3pl-3sg close-still put-PAST

nya-nja-ku, *yinga-ø-ø* *nya-nyi* *puwarrilpa-ø*
see-INF-PUR CAT-3sg-3sg see-NONPAST painting-ABS

yaℓumpu-ø *yaku-ø*
that-ABS dancer-ø

They put him right in their midst to see it, in order that he see that painted dancer.

96. *Warrukirdikirdi-lpa-lu* *karri-ja.*
encircling-CAT-3pl stand-PAST

They were standing all around in a circle.

97. *Kala* *rdaku-ø-ju-lu-ø* *nyurru-juku* *pangu-rnu,*
but hole-ABS-TP-3pl-3sg ready-still dig-PAST

manu-lu-ø *warlu-ø* *wiri-ø* *yirra-rnu.*
and-3pl-3sg fire/firewood-ABS big-ABS put-PAST

But they had already dug a hole and put a big fire in it.

98. *Jungajuku* *muku-ø* *pu-ngu-rnu* *yali-ø*
straightway all-ABS do-PAST-hither that-ABS

puwarriℓpa-ø
painting-ABS

So straightway he did toward him all that painting (ceremony).

99. *Milki* *yirra-rnu-ø-rla* *yaℓumpu-rla-juku*
show-PAST-3sg-3sg that-LOC-still

He showed it to him right there.

100. *Yarnka-ja-lku-lu-rla* *yangka-ji* *kaarnka-ku*
grab-PAST-then-3pl-3sg aforementioned-TP crow-DAT_1

Then they grabbed that aforementioned crow.

101. *Ma-ninja-rla-lu-ø* *julyurlkuju-rnu* *warlu-kurra.*
get-INF-sequencer-3pl-3sg toss into-PAST fire-ALL

Getting him, they tossed him into the fire.

102. *Warlu-ngku-ø-ø* *janka-ja* *muku-ø*
fire-ERG-3sg-3sg burn-PAST all-ABS

The fire burned him up.

103. *Ngula-ngurlu-nya* *yalumpu-ø-juku* *kaarnka-ø*
relator-ABL-emphatic that-ABS-still crow-ABS

kuja *panu jarri-ja-lku-lu*
relator become many-PAST-then-3pl

It was certainly from that place that many crows came out of.

104. *Muku-ø-lku-ø* *paarpardi-ja.*
all-ABS-then-3sg fly-PAST

All of them then flew.

105. *Ngari-lki-lpa-ø* *rdulypardulypa ngarnu!*
only-then-CAT-3sg explode from-PAST

Why, they were just exploding out of there!

106. *Muku-ø-rra-lpa-ø* *pardi-ja* *kaarnka-lku*
all-ABS-thither-CAT-3sg rise-PAST crow-then

Then all the crows were rising out.

107. *Ngula jangka-nya-nganta* *ka-ø* *kuja*
after that-emphatic-reportedly CAT-3sg relator

yalumpu-ø *maru-ø-lku* *nyina*
that-ABS black-ABS-then sit/be

And supposedly that's why those ones are now black.

VOCABULARY

J

jaalyma-	IV.5,	plot against, plan for
Jakurdukurdu	noun,	young boy's initiation tour
jamirdi	noun,	FaSiSo, FaSiDa
janka-	TV.1,	burn, cook it
janka-	IV.1,	burn
japi-	TV.2,	ask
jara	noun,	fat, oil, grease
jaru	noun,	word, language, tale
jarrawarnu	noun,	guardian, worker in a ceremony
jimanypa	noun,	firesaw, firesaw method
jimarri	noun,	circumciser
jinta	noun,	one
jirrama	noun,	two
jirrnganja	preverb,	having, possessing, with
jiti-	IV.1,	dismount
juka	noun,	guardian
jukurrpa	noun,	the 'dreaming'
julyurlkiji-	TV.2,	toss it into (fire or water)
jungajuku	adverbial link	straightway, thus
jupukarri-	IV.1,	stop
jurnarrpa	noun (mass),	goods, belongings, possessions
jurnta	preverb,	away from
jurrku	noun,	same camp, place

K

ka-	TV.3,	carry, take, bring
kaarnka	noun,	crow
kakarda	noun,	nape of the neck
kala	adverbial link	and, but

karla-	TV.1,	dig (for)
karlarra	noun,	west
karli	noun,	boomerang
kamparru	noun,	front of, ahead of
kaninjarra	noun,	downward, along the bottom
kankarlarra	noun,	upward, along the top
kari	ejaculative,	hey! certainly! absolutely!
karinganta	sentence particle,	assertive, assuredly
kiji-	TV.2	throw, initiate (as in *ngarrka kiji-)*
kirda	noun,	father, class of ceremonial bosses
kirri	noun,	camp
kuja	relator,	thus, so, which, who
kulanganta	sentence particle,	counterfactual
kulkurru	noun,	middle, halfway, midst
kuna	noun,	faeces, anus, bowel
kuruwarri	noun,	sacred symbols, designs
kurdiji	noun,	shield, sacred ritual
kurdu	noun,	child, (pre-pubescent)
kutu	adverb	nearby, close
kuyu	noun,	meat, game, animal

L

langa	noun,	ear
lawa	interjection noun	no nothing
linji	noun,	dry, brittle
lurlju	noun,	hill, rise 'jump-up'
luwa-	TV.2	shoot, spin (hairstring), saw

M

ma-	TV.5,	transitivizing verb stem do, pick up, get
marlurlu	noun,	initiate
manu	conjunction,	and
marna	noun,	grass
mapa-	TV.2,	rub
maru	noun,	black
marda-	TV.2	have, hold
mardukuja	noun,	woman
mayingka	noun,	axe,
marru	noun,	house (Gurindji loan)
milkiyirra-	BTV.2,	show, demonstrate
mirntangali	noun,	noon
miyi	noun,	vegetable food
miyimiyinya-	TV.3	scrutinize
muku	noun,	all, complete, total
mulju	noun,	soakage
munga	noun,	night
mungalyurru	noun,	morning
mutika	noun,	car (English loan)

N

nalija	noun,	tea

NG

nga-	TV.4	eat, drink
ngaju (lu)	pronoun,	I, me
ngaka	adverb,	later, after
ngapa	noun,	water, any beverage
ngari~ngayi	sentence particle,	only, just, merely

ngarrka	noun,	man
ngarri-	TV.2,	tell, relate, swear
ngarrurda	noun,	awe, fear, surprise
ngati	noun,	mother
ngula	relator,	who, which, then ?
ngulajangka	conjunction,	after that, then
ngulajuku	sentence particle,	finish
nguna-	IV.1,	lie, rest, sleep, camp
ngurrju	noun,	good
ngurrjuma-	TV.5	make

NY

nya-	TV.3,	see
nyanungu	pronoun,	he, she, they
nyampu	pronoun,	this, this one
nyarrpa	pronoun,	what, how
nyarrpara	pronoun,	where
nyina	IV.1	sit, live, be
nyurru	adverb	ready, already

P

paarpardi-	IV.1,	fly
paka-	TV.2,	hit, strike, impinge upon, dance
palka	noun,	present, here, body
palkama-	TV.5,	find, expose, locate
parlpa	noun,	circumcisee
parlupu-	TV.3,	catch sight of
panu	noun,	many
parnta nya-	TV.3,	smell
pangi-	TV.2,	dig
papardi	noun,	older brother

parduna	noun,	dry
pimirdi	noun,	MoSi
pina	noun,	wise, knowledgable
pina	adverb,	back, reverse (of verb)
pu-	TV.3,	strike, kill, dance, do
puluku	noun,	cattle (English loan)
purla-	IV.1,	shout, cry out
purlapa	noun,	public ceremony
purdangirli	noun,	behind, following
purdanya-	TV.3	hear, think, feel (refl.)
purra-	TV.1	cook, burn
puta	adverb,	try, attempt
puwarrilpa	noun,	body painting

RD

rdaku	noun,	hole
rdijika-	TV.3,	set line of fires
rdulypardulypanga-	IV.4	explode out of
rdungkurrpaka-	TV.2,	shatter, smash
rduyulu-	TV.3,	set a smoky fire

T

turnujarri-	IV.1,	gather together
turnuma-	TV.5,	gather, muster them

W

warlu	noun,	fire, firewood
wangka-	IV.1,	speak, say, talk
wapirra	noun,	father/son, God
warrka-	IV.2	climb
warru	adverb,	around

warrukirdikirdi	noun,	encircling
wati	noun,	man
watiya	noun,	tree, wood, stick
wirlinyi	noun,	hunt
wiri	noun,	big
wirriji	noun,	hairstring
wirrpiyi	preverb,	entrapping
wita	noun,	small, little
wungu ma-	TV.5,	see (restricted men's language)
wuraji	noun,	evening
wuukayi	noun,	tired, exhaused

Y

ya-	IV.5,	go, come
yaja-	TV.2	enlist
yaku	noun,	painted dancer
yali	pronoun,	that (far), over there
yalyajarri-	BI.1,	decide about
yama	noun,	shade, picture
yampi-	TV.1,	leave, let it alone
yantarli	adverb,	nearby
yarnka-	BIV.1,	grab for it
yarnka-	IV.1,	set off, leave
yangka	pronoun,	aforementioned one
yapa	noun,	people
yarda	adverb,	again
yardijardiji	noun,	type of seed
yarri	preverb,	attacking, hostile
yawulyu	noun,	women's ceremonial business
yijardu	noun,	true
yilya-	TV.1,	send

yimi	noun,	tale, story
yimirri-	TV.3,	fool, deceive, trick
yinya	adverb	over there
yingki-	TV.2,	set fire to
yirdiyi	noun,	road
yirra-	TV.2,	put, place, set
yirripura-	TV.1	tell a story, follow with eyes
yiwarra	noun,	road, Milky Way
yuka-	IV.1,	enter
yurlpa-	noun,	ochre
yunpa-	TV.3	sing
yuwayi	interjection	yes

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A Preliminary Description of Propositional Particles in Warlpiri[1]

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0. INTRODUCTION

Until recently, there has been little written about 'particles' in descriptions of Australian languages. Reference is made to them in Dixon (1980:284) where he writes: 'Australian languages typically have a set of a score or so "particles" that provide logical/modal-type qualification of a complete clause. These are often the only types of words which cannot take any sort of inflection.'

Dixon (1981:82-3) describes the particles of Wargamay. Douglas (1981:256) gives examples of 'sentence particles' in Waljarri. Crowley (1981:184) gives a list of 7 'particles and interjections' in the Mpakwithi dialect of Anguthimri.[2] A fuller description of particles in Margany and Gunya is given in Breen (1981:343-6).

In chapter 9 of her grammar of Ngiyambaa (1980), Tamsin Donaldson describes a set of 'particles' which have functional correspondence with some members of the Warlpiri set described in this paper. However, Donaldson includes in the category 'particle' dependent enclitic forms which we exclude by definition from the category of 'particle'. What Donaldson (1980:238) calls 'free particles' would be included in our category 'particle'.

Similarly Nash (1980:186-7) includes in his category of 'modal particles' phonologically independent forms which are classified as particles in this study, as well as phonologically dependent forms (affixes) which will be excluded from our category of particles.

While this paper is particularly concerned with only one subcategory of particles, namely the Propositional Particles (PPs), each of which is described and analysed in some detail in section 2, it is necessary to have an understanding of the role and nature of all four subcategories to appreciate their interrelations, similarities and differences. Thus we will give a brief contrastive description of each of the four subcategories in section 1, partly to explain and justify the criteria used to establish these subcategories. The category 'particle' is defined with reference to other word categories such as noun and verb.

In section 2 we will attempt to describe and analyse the semantic content and pragmatic role of each of the propositional particles.

1. PARTICLE: PHONOLOGICAL, MORPHOLOGICAL AND SYNTACTIC STATUS

1.1 PHONOLOGICAL STATUS

A particle in Warlpiri is a phonologically independent word since it can appear utterance initially and can carry a main stress on its first syllable. The placement of main stress on the initial syllable is the characterizing feature of the word in Warlpiri. (No word can have less than two syllables.) The subcategory of particles which we will call 'interjections' functions as the sole constituent of an utterance.

In Warlpiri, all particles can function as the phonological base of the auxiliary[3] — that is as the first or host element to which the aspect, subject-object, person-number clitics are suffixed. The preferred position for the auxiliary is as first or second constituent of the clause.

Where the auxiliary base is non-null and has more than one syllable, it can stand as a phonologically independent word as in (1).

(1) *Ngapa* *kaji* *wantimi...*
water UNINST fall-nonP

'When it rains...'

Where the base is phonologically null, then the auxiliary clitics are suffixed to the first constituent of the clause as in (2).

(2) *Ngapa-rna-rla* *yungu.*
water-1s-3-io give-P

'I gave him some water.'

1.2 MORPHOLOGICAL CHARACTERISTICS

The 'particles' host no characteristic inflections as do the nouns (case suffixes) and verbs (tense suffixes). With very few exceptions (see 2.6) they do not host suffixing enclitics other than the auxiliary clitics. Warlpiri nouns and verbs can both host one or several of a very large number of enclitics with phrasal or sentential scope.

If we limit our definition of 'particle' to the phonological criteria given in 1.1 (independent word) and to the morphological criteria just given (no characteristic inflection), then we find ourselves with a rather large set of words in Warlpiri which we would like to subcategorize according to syntactic and semantic criteria and pragmatic function.

A list of all particles is given in chart 1. They are subcategorized according to syntactic criteria into four subcategories: Propositional Particle (PP), Sentential Particle (SP), Interjection (INTJ) and Conjunction (CONJ). The semantic criteria according to which these subcategories are established is set out in the following subsections.

CHART 1

Warlpiri Particles

PROPOSITIONAL PARTICLES (PP)	SENTENTIAL PARTICLES (SP)	INTERJECTIONS (INTJ)	CONJUNCTIONS (CONJ)
Nganta		*Nganta*	
Kari		*Kari*	
Karinganta		*Karinganta*	
Ngari/Ngayi		*Ngari/Ngayi*	
Marda		*Marda*	
Ngarra	*Ngarra~*	*Ngarra*	
Kapi/Kapu	*Kapi/Kapu*	*Kapi*	*Kapi~*
Kulanganta	*Kula*	*Yuwu*	*Manu*
Wayi	*Winjarra/Winjarni*	*Wayi(nta)*	
Murra	*Nyangurla*	*Yuwa*	
(Kaji)	*Kaji*	*Yuwayi*	
(Waja)	*Kuja~Ngula*	*Murraja*	
(Mayi)	*Kujaka*	*Karija*	
	Kajika	*Wara*	
	Kalaka	*Yatiyi*	
	Kala	*Kala*	*Kala*
	Pangkala	*Yakarra*	
	Kuku	*Yakayi*	
	Yungu/Yinga/Yingi	*Yumpa*	

1.3 SYNTACTIC BEHAVIOUR

A particle which typically constitutes an utterance on its own is under the heading of 'interjection'. The pragmatic function of interjections is usually to express the speaker's attitude or reaction to the preceding linguistic utterance or to an extra-linguistic event. The semantic content may be an expression of surprise (*yakarra*), joy, approval (*wara, yatiyi*), consternation (*yakayi*), interrogation (*nganta, kari, ngayi, kapi, mayi, ngarra*), attention seeking (*Yuwa, wayinta, yumpa*), agreement (*yuwu, yuwanyi*), ignorance (*karija, murraja*), probability (*marda*), negation, disagreement (*nuu, nati*).

Some interjections could be described as conventionalized linguistic responses to a situation type.

We note that some of the propositional particles are cross-classified as interjections. Before discussing in detail reasons for this, we will examine the difference between the propositional particles and the sentential particles.

PPs are not so tightly intergrated into the syntax of a clause as are the SPs. This shows up formally in several ways. PPs can be extraposed in some way to a clause. They can be preposed or postposed to the clause which expresses the proposition[4] over which they have semantic scope.

In (3) *kulanganta* is preposed to the clause *'Ngapa kapi... pirrarhi'*. 'The rain would have fallen heavily yesterday.' While the PP has semantic scope over the entire proposition, it plays no active syntactic role in it.

(3) *Kulanganta ngapa kapi wantiyarla wiri pirrarni.*
PP water FUT fall-IRREAL big yesterday

'I thought that it would have rained heavily yesterday.'

By contrast the SP *kapi* which expresses a future tense (or a time point ahead of another established time point) is an intregal part of the clause syntactically as the potential auxiliary base, as well as semantically as the future tense marker.

In (4) the PP *nganta* is postposed to the clause *'Tarnngangku-ka pakarni'*. signalling that this information is being reported second hand by the speaker.

(4) *Tarnnga-ngku-ka paka-rni nganta.*
always-ERG-IMPF hit-nonP PP

'He always hits her, she says.'

While a PP may be superficially more tightly integrated syntactically into a clause, as in (5) where it hosts the auxiliary 3pl clitic *-lu*, such a role is not obligatory as seen in (3) and (4).

(5) *Kulu-wangu nganta-lu nyina-ya yurrkunyu-kujaku.*
fight-PRIV PP-3pl be-IMP police-avoid

'The police said not to be fighting or you'll be in trouble with them.'

On the other hand, SPs obligatorily constitute the auxiliary base, i.e. the auxiliary clitics are obligatorily suffixed to the SP as in (6), where the 3pl clitic *-lu* is suffixed to *kapu*.

(6) *Wati-patu-rlu kapu-lu purlapa pinyi.*
man-Dpl-ERG FUT-3pl corroboree dance

'The men will dance a corroboree.'

Given that the SP is the first element in the auxiliary base, it cannot be extraposed to the clause; it is an integral part of the clause.

Sometimes the entire auxiliary is repeated at the end of a clause as in (7), especially in a narrative, as a stylistic devise, but the base is not devoid of the auxiliary clitics. It is not possible to isolate the SP from the auxiliary clitics.

(7) *Kala-lu yanu, yanu, yanu... — ngapa-kurra kala-lu.*
RP-3pl went, went, went water-ALL RP-3pl

'They kept on going and going — to the water hole they did.'

Thus we have established a crucial difference between PPs and SPs. PP may form the phonological base of the auxiliary as the first morpheme, but not obligatorily so. SPs must form the phonological base of the auxiliary as the first element.

It follows from the above, that while PP may appear on the surface in virtually any position in the clause, the SP is restricted to the auxiliary position, that is as the first or second constituent of the clause.

Given that a PP can be postposed to a clause or to a word or phrase over which it has semantic scope, it is not surprising that it can be used as an interjection referring either to a previous utterance or to an understood linguistic or extralinguistic context.

Propositional particles indicate the speaker's attitude to or judgement concerning the proposition expressed by the clause to which the PP is attached, or the speaker's role with respect to the speech act itself. The semantic function of a PP typically extends beyond a single clause to the discourse or to the extra-linguistic context in which the clause containing the PP is spoken.

SPs express obligatory temporal/modal information or provide a formal syntactic linking as well as semantic linking between clauses. SPs such as *kaji* (uninstantiated event), *kuja* (instantiated event), *yungu* (casual) have the latter function. SPs such as *nyarra* ~ *kapu*[5] (future), *kula*, *nyangurla*, *winjarra* (negative), *pangkala* (permissive), *kulu* (connative), *kala* (remote past), *kujaka* (present instantiated), *kajika* (present uninstatiated), *kalaka* (potential)[6] provide temporal/modal information.

While the auxiliary base can be phonologically null in Warlpiri, it is semantically non-null since the absence of the aspectual affixes *-ka* and *-lpa* indicates the perfective aspect. The imperfective aspect is marked by *-ka* with the non-past verb form and by *-lpa* with the past and irrealis verb forms.[7] This is shown by examples (8) - (13):

(8) *Wati ya-nu.*
man go-P 'The man went/has gone.'

(9) *Wati-lpa yanu.* 'The man was going.'

(10) *Wati ya-ni.*
man go-nonP 'The man may go.'

(11) *Wati-ka yani.* 'The man goes/is going.'

(12) *Wati ya-ntarla.*
man go-IRR 'The man should have gone.'

(13) *Wati-lpa yantarla.* 'The man should go.'

From (8) to (13) it can be seen how it is the combination of aspectual affix and verbal suffix that conveys the overall tense/mood/aspect content of the clause.

In addition to the aspectual affixes *-lpa* and *-ka* which can constitute by themselves the auxiliary base, there are the SPs which can be prefixed to the aspectual affixes, or which substitute for them as the auxiliary base.

There are very strict co-occurrence restrictions between SPs and the Imperfective aspect affixes *-ka* and *-lpa*. No such co-occurrence restrictions hold between the PPs and aspectual affixes. Also PPs can combine with any verbal form, whereas SPs only co-occur with a limited subset of the verbal forms.

The 'future' SP *kapu~kapi~ngarra* only combines with the non-past and irrealis verb forms in the perfective (phonologically null) aspect.

The 'instantiated event' SP *kuja* does not occur with the irrealis verb form — it only co-occurs with the past and non-past verb forms. The remote past SP *kala* only combines with the past verb form. In the north-east Lander River dialect and in the Hansen River dialect it is often combined with the imperfective *-lpa* affix, but in the south-western Warlpiri the person-number clitics are suffixed to *kala* without the intervening imperfective affix.

Following Hale, we have chosen to analyse *kajika, kujaka* and *kalaka* as synchronically irreducible forms even though they are probably historically formed from the fusion of a SP and the imperfective aspect affix *-ka*. Since they only combine with the non-past verb form as does *-ka*, such a derivation seems very likely, but the synchronic semantic content is not in direct correspondence with the putative constituents.

The 'uninstantiated event' SP *kaji* combines with the past (rare), non-past and irrealis verb forms and with the imperfective aspect affix *-lpa*.

The negative SPs[8] are also subject to strict co-occurrence restrictions. *Kula* is used with the past, non-past and irrealis verb forms and with both *-lpa* and *-ka* affixes as well as without them. It cannot be used with the imperative verb form to give a negative command. Similarly *winjarni ~ winjarra*[9] is used like *kula* with the past, non-past and irrealis verb forms and combines with *-ka* but not with *-lpa*. *Nyangurla*, used in Lajamanu Warlpiri, is only used with the imperative verb form to express a prohibition or negative command.

Pangkala when used with the non-past verb expresses the speaker's desire that an event be allowed to be realized. When used with the past verb form it signals the speaker's supposition that the event must have been realized despite possible let or hindrance. With the irrealis verb form it signals the speaker's conviction that the unrealized event 'should have been realized' in spite of that which prevented its realization.

Kuku, which expresses an attempt or an intention made by the speaker to act in the manner described by the clause, is, like *pangkala*, typically in clause initial position. It can be used with the past, non-past and irrealis verb forms and with the imperfective affixes *-ka* and *-lpa*, although the perfective aspect is more usual.

The SP *yungu* (south-west Warlpiri), *yinga* (north-east Warlpiri) has a monosyllabic alternate *yi-* which is not a particle, since we have defined a particle as an independent word, but a prefix to which may be added the imperfective affixes *-ka* and *-lpa* and/or the auxiliary person-number clitics. *Yungu ~ yinga~yi-* expresses a relation of causation between two propositions typically expressed by clauses. It combines with the non-past, past and irrealis verb forms.

We note that there are a few SPs which are homophonous with the PPs: *ngarra, kapi ~ kapu* and *kaji.* It is possible that the SP is derived from an original PP. PPs can form the base of the auxiliary; thus it is reasonable to assume that in some cases the PP becomes fixed in the auxiliary base role, like a SP, and at the same time is semanticallv reinterpreted.

As PPs *kaji* and *kapi ~ kapu* are interrogative particles, while *ngarra* serves to add emphasis. As SPs their semantic content is however quite different, as we have seen above.

The conjuctions are 'particles' according to the phonological and morphological criteria by which we have defined that category. The conjunctions conjoin like syntactic entities. Like the PPs and SPs they can form the base of the auxiliary base as in (14).

(14) *Luwarnu-rna manu-rna pakarnu-yijala.*
shot -1s and -1s hit-also

'I shot it and hit it as well.'

Unlike the SPs, conjunctions do not obligatorily host the auxiliary clitics. Conjunctions can combine with both PPs and SPs in a single clause as in (15).

(15) *Yunta-pala wiri yirrarnu manu warlu-pala nganta yarrpurnu.*
shelter-3D big put-P and fire - 3D PP set-P

'They put up a big shelter and reportedly built a fire.'

Manu is the south-west Warlpiri 'additional' conjunction roughly equivalent to the English 'and' while *kapi* is the north-east form.

Kala indicates contrast or non-consequent event/proposition, roughly equivalent to English 'but', 'however'.

In chart 1 under the heading Propositional Particles there are some forms which are given in parentheses. These words do not appear clause initially but are postposed to a constituent of a clause or to the entire clause. They can also form the base of the auxiliary. If we relax the condition that particles are words which can appear clause initially, then these forms must also be classified as particles — a possible subset of the propositional particles. While they are listed in this study in the interest of completeness, they are not studied in detail in section 2.

2. PROPOSITIONAL PARTICLES

2.1 DEFINING CHARACTERISTICS

Propositional particles are those particles which may form the base of the auxiliary but which do not necessarily do so.[10] They may be extraposed to the clause over which they have semantic scope or contained in it. Propositional particles combine with other particles in a clause. They follow a conjunction and may precede or follow a sentential particle, the obligatory auxiliary base. Several propositional particles may be found in the one clause. The constraint on the co-occurrence of particles would appear to be semantic incompatibility.

While PPs have virtually no syntactic role within a clause, they have an important semantic role and pragmatic function. They semantic content of the PPs has scope over the proposition expressed by the clause or constituent to which the PP is attached, modifying the semantic content of the clause or constituent especially with respect to the role of the speaker in the speech act — thus combining a pragmatic function with the semantic one. Since all PPs have a recognizable semantic content, we will attempt a lexical definition of each of them following a description of their usage.

2.2 *NGANTA*

Nganta is typically in first or second position in a clause, host to the auxiliary clitics. It is also found postposed to a clause over which it has semantic scope. It can also be placed in post-auxiliary position.

The inclusion of *nganta* in a declarative sentence indicates that the speaker only affirms the proposition expressed by the sentence to be true if the indirect evidence or hearsay on which it is based proves reliable or is known or judged by the speaker and/or hearer to be so. It is thus somewhat equivalent to the English 'They say...', 'I've heard that...', 'reportedly'.

By using *nganta* the speaker refrains from asserting the truth of a proposition. He distances himself from the proposition, implying that he is merely reporting what was asserted by another. This can be seen by comparing (16) and (17).

In (16) we have a straightforward assertion by the speaker that the house in question is destined for himself, the speaker.

(16) *Ngaju-ku ngulaju yuwarli.*
1-DAT that(is) house

'That house is for me.'

In (17) the speaker makes a claim that is less strong. He implies that 'someone' (known or unknown to the participants in the speech act) has asserted that the house is for him, the speaker.

(17) *Ngaju-ku nganta ngulaju yuwarli.*

'They say that house is for me.'

In the enunciation of imperative sentences, *nganta* is used to attentuate the role of the speaker issuing the command in the same way as he attentuates his role as asserter of a proposition in declarative utterances. In (18) the speaker issues a direct command, thus identifying himself as its author.

(18) *Marna-lu ma-nta!*
spinifex-3PL get-IMP

'Pick up the spinifex grass!'

In (19) the speaker, by including *nganta*, distances himself from the authorship of the command, implying that it originated elsewhere and that his (speaker's) role is merely that of reporter.

(19) *Marna nganta-lu ma-nta.*

'They said to pick up the grass.'

Examples (18) and (19) can be contrasted with (20) in which the speaker issues a direct command of which he is the implied author, but attempts to attentuate the directness of the relation between himself and the order by postposing *nganta*, pronounced with questioning intonation, thereby attempting to involve the addressees in the actual authorship of the command. The speaker tries to make the addressees become party to the command itself as co-authors by their implied acquiescence.

(20) *Marna-lu ma-nta, nganta?*

'Pick up the grass won't you?'

Nganta does not indicate any specific referent as the source of the proposition or command. Where the addressee cannot interpret a specific referent or where none is intended by the speaker, the source or original author's identity is vague as in 'They say...' or 'I've heard that...' where there is no known or identifiable antecedent.

However the use of *nganta* often involves a very high degree of co-operation or shared knowledge between speaker and addressee so that a specific value (referent) attaches to the role of original author. For this reason the scope of *nganta* can be seen to go beyond the clause or sentence in which it is found to the larger discourse and/or extralinguistic context.

In (21) the speaker issues a direct command of which he is the implied author (unmarked case).

(21) *Nyuntu-ju-rla nyuntu-parnta-ku ya-nta!*
2-DEL-2io 2-CON-DAT go-IMP

'You go to your spouse.'

In (22) it is most probable that, while the speaker by using *nganta* implies that he is not the author of the command but merely the reporter, the addressee will attribute the authorship to his (addressee's) spouse, if the contextual clues point to such an origin. This interpretation is made explicit in the English gloss. Where the source of the statement is known to the speaker in English, then it is normal for him to make it explicit. The construction type, using the active verb 'say' in the main clause and reporting the original statement in a subordinate clause introduced by 'that...', forces the identification of the author on the reporting speaker since the subject of the verb 'say' must be given. By using a particle in Warlpiri there is no such constraint.

(22) *Nyuntu-ju nganta-rla nyuntu-parnta-ku ya-nta.*

'Your wife says you are to go to her.'

Similarly by comparing (23) and (24) we see how the speaker in (24) distances himself from the command by renouncing his authorship of it and at the same time, in the appropriate context known to both the speaker and addressees, implies the identity of the original author, i.e. the police. Of course if some other information were available to the addressee concerning the source of either (22) or (24), then the identity of the author would be interpreted differently than it is, as given in our English glosses.

(23) *Kulu-wangu-lu nyina-ya yurrkunyu-kujaku.*
fight-PRIV-3PL be-IMP police-AVOID

'Don't fight or you'll be in trouble with the police.'

(24) *Kulu-wangu nganta-lu nyina-ya yurrkunyu-kujaku.*

'The police said not to fight or you'll be in trouble with them.'

Nganta is also used in interrogative sentences such as (25) in which the speaker questions the addressee as to the truth of the proposition 'that your grandfather came' and at the same time distances himself from this claim by implying (by the inclusion of *nganta*) that his knowledge comes from a third party — the originator or author of the proposition.

(25) *Junga-nya nganta jamirdi-puraji-ji ya-nu-rnu?*
true - ? PP grandfather-2kin-DEL go-P-hither

'Is it true what I heard that your grandfather came?'

The identity of the 'author' can be known from extralinguistic information available to the speaker and addressee(s). For example if a woman is publicly accusing someone of hitting her son, one spectator might ask another the question posed in (26) to which the reply (27) might be given.

(26) *Ngana-ngku nganta pakarnu?*
who-ERG PP hit-P

'Who does she say hit him?'

(27) *Ngana-ngku mayi nganta pakarnu.*
who-ERG ? PP hit

'I don't know who she says hit him.'

Because it is evident from the scene at which both speakers are present as spectators who is making the claim about the hitter of her son, it is normal to make the mutual common assumption that the woman observed to be making the claim is the author of the claim.

As the speaker by using *nganta* distances himself from the authorship of the declaration or command he enunciates, he also fails to overtly indicate the identity of the 'author' although the latter may be known by the speech act participants.

The speaker also fails to make explicit his own position with regard to the truth of a proposition or the appropriateness of a command. However by varying the intonation pattern as well as by extrinsic knowledge (outside the scope of the sentence containing *nganta*) shared by the speech act participants, or assumed by the speaker to be available to the addressee, the speaker may make known his position.

For example, where it is shared knowledge that a certain person claims to be beautiful, then the speaker may convey his disagreement with such a judgement or at least an ironical comment by (28).

(28) *Yuntardi nganta!*
beautiful PP

'She thinks she's beautiful (but).'
'She's beautiful, supposedly.'

The role of *nganta* is thus extended to imply that the speaker knows or believes the proposition over which it has scope to be false. While the speaker does not assert that the proposition is false, he implies that it is false. This is illustrated by (29) taken from a mythological text about an evil old man who pretended to his sons to be blind. The sons were taken in by the ruse — believing him to be blind. Of course the story-teller knows better!

(29) *Nganta-lpa purlka yangka-ju Lungkarda parntarrija — pampa*
PP-IMPF old man ANAPH-DEL Lungkarda crouched-P blind
nganta nyanja-wangu. Kala ruyu parntarrija.
PP seeing-PRIV but ruse crouch-P

'That old man Lungkarda was supposedly crouching down reckoning he was blind — that he couldn't see. But he was just crouching down pretending.'

By using *nganta* the author distances himself from the proposition that 'the old man is blind' since he knows it to be false, as he explicitly states in the second sentence beginning 'Kala...'. The author implies that it is the subject of the sentence, i.e. the old man, who claimed he was blind and who pretended to be so; thus he is the implied author of the proposition — not the speaker.

By using *nganta* the speaker disclaims authorship of a proposition or command expressed by the clause with *nganta*. The identity of the 'author' is not made explicit in the clause but may be determined from the discourse and/or from the extralinguistic context shared by the speech act participants. By using *nganta* the speaker may imply that the proposition is believed by him to be false. The postposing of *nganta* to a declaration of intention or a command can also serve as a plea by the speaker for the approbation of the addressee(s).

2.3 *KARI*

When contained in a clause, *kari* is almost always in initial position. By prefacing the expression of a proposition by *kari*, the speaker implies that he has direct observable evidence that the proposition expressed by him is true and that he believes or 'knows' it to be true. This is illustrated by the examples (30)-(32).

(30) *Kari ka-rna maju-lku nyina.*
PP IMPF-1 bad-SEQ be

'I know I'm very sick now.'

(31) *Kari-ka ngurrju nyina nyurnu-jangka-ju.*
PP-IMPF good be ill-from-DEL

'I see that he is better and over the illness.'

(32) *Kari nyampu-rla-kula-lpa nyina-ja-wu — yintirdi-rla*
PP here-LOC-PREST-IMPF be-P-EMPH stump-LOC
ngapa-kujaku.
water-AVOID

'I see that it's here he was sitting — on the stump to avoid the water.'

Like *nganta*, *kari* has a speaker-centric pragmatic role, since it makes overt the relation between the speaker and the semantic content of the clause. In a third person narrative text in which the narrator plays no active role — by not inserting his temporal frame of reference into that of the narrative temporal frame of reference — then PPs such as *nganta* and *kari* are rarely used.

Kari indicates that the proposition is affirmed true by the speaker because of direct reliable evidence available to him at the time of speaking. Authorship of the proposition is claimed by the speaker and attributed by the addressee to the former. For that reason in the context of a narration, *kari* indicates a shift to direct speech by a story character and hence a shift in narration time — to the present of the story events' frame of reference — away from the present of the actual narration or speech act signalled by the use of the past tense. This is illustrated in (33) and (34).

(33) *Milpa-ngku-jala kala-palangu tarda-kuju-rnu.*
eye-ERG-EMPH RP-3Do sight-throw-P
"Kari yali-kila-pala rdipijarni. Kuku-rna kuja pampa-jarri-lki."
PP there-PREST-3D come-P-hither SP-1 thus blind-INCO-SEQ

'He caught sight of them with his very eye. "I see them there coming this way. I must now make as though I'm blind (to deceive them)".'

(34) *Nyangu, nyangu. Karrinja-pardija-lpa. "Kari lawa-juku*
saw saw standing-rose-IMPF PP no-CONTS
ka-palangu karri. Wurnturu marda-pala yanu."
IMPF-3Do stand far perhaps-2D go-P

'He looked and looked. He got up. "I see that they are not there yet. They have probably gone along."'

In the first sentence of (33), the narrator expresses the proposition that the old man (understood) caught sight of the two (sons). The past tense is used which indicates a time of reference prior to that of the time of speaking or narration itself. Then the speaker shifts the frame of reference so that the following sentence introduced by *kari* is the reported direct speech of the old man (story character). The presence of *kari* signals this change of mode or time reference indirectly, since *kari* indicates a direct relation between the speaker and the proposition.

By using *kari* the speaker associates himself with the proposition and to the speech act, indicating that he has direct evidence of the truth of the proposition at the time of the speech act. Since it is not possible for the story-teller himself to perceive the two mythological characters at the same time as he relates the story (given the two incompatible temporal frames of reference), the clause introduced by *kari* can only be attributed to one of the story characters — in this case the wicked old man.

Kari preposed to a clause is typically used to indicate that the speaker is consciously aware of a given set of circumstances or facts relevant to the proposition, that he is reflecting on or thinking about them or figuring out a plan, solution, explantion, course of action. This is illustrated by the following sentences taken from texts.

(35) *Kari--i, kalaka-ju-lu kuja katirni-rra — panu-ngku.*
PP likely-lo-3PL thus weigh-thither — all-ERG

'How am I going to manage? There are so many of them that they will be too heavy for me (to carry).'

(36) *Ngula puta-manngu-nyangu-lpa, ngula kuja-lpa wangka-ja:*
ANAPH some-mind-perceive-IMPF ANAPH thus-IMPF speak-P
"Kari... nyampu-rlu-ju mayi-ji wiri-manu ngati-nyanu-wangu?"
PP this-ERG-DEL ?-lo big-CAUS mother-ANAPH-PRIV

'He thought about it some and then said, "Now I understand. Could it be that this one reared me who has no mother?"'

(37) *Yarda manngu-nyangu: "Kari... karnta ka-rna-ju ngurrju-mani."*
again thought PP woman IMPF-1-lo good-CAUS

'He thought about it again. "I know, I'll make myself a woman."'

(38) *Yimi-ngarrirni-rna-nyarra? Kari nyinami-yi-rna parduna?*
story-tell-1-2PLo PP be-nonP-CONT-1 'dry'

'Can I tell you? Or should I remain silent?'

Thus *kari* signals that the speaker has directly observed or become aware of, or conscious of, a situation or set of facts from which he draws a conclusion expressed by the clause prefaced by *kari*. He may question that conclusion as in (36) and (38) or simply make a declaration about it as in (35) and (37) as well as in previous examples.

As an interjection *kari* is commonly used to signal the observation of a situation or fact or to ask a question about a known proposition. Thus in (39) *kari* has semantic scope over a preceding statement.

(39) *Nantuwu-lu muku-palija. Kari?*
horse-3PL all-die-P PP

'The horses all died. Didn't they?'

Kari constrasts with *nganta* since the former signals direct observation and formulation of a proposition by the speaker who associates himself personally with the claim made, whereas *nganta* signals that the speaker is merely reporting information received and in some cases implies a contrary point of view.

2.4 *KARINGANTA*

While *karinganta* is made from the amalgamation of the two preceding particles, it is synchroncially an indivisable word. Unlike *nganta* which serves to distance the speaker from the semantic content of an utterance by implying second-hand reporting, or *kari* which signals a conclusion drawn from direct evidence by the speaker, *karinganta* signals a statement of fact asserted by the speaker, a proposition that the speaker claims is true. *Karinganta* has a declarative function. By prefacing a statement or a command with *karinganta* the speaker signals that he is the author of the proposition or order; thus he makes a strong claim or direct command.

In (40) the speaker makes a claim based on his knowledge of the subjects' relationship and of the kinship system in general.

(40) *Karinganta Jakamarra ngulaju Napanangka-kurlangu.*
PP Jakamarra that is Napanangka-POSS

'I know he's a Jakamarra because his mother is a Napanangka.'

In (41), on the other hand, the claim is made that the subject observed at the time of speaking is the one being referred to in a previous context.

(41) *Nyampu-kula karinganta nyanungu.*
here/this-PREST PP 3

'This here is the one.'

Similarly in (42) the proposition prefaced by *karinganta* is claimed to be true based on observable evidence, as is the case with *kari*.

(42) *Ngula-ngurlu kala-palangu yirri-puraja.*
ANAPH-EL RP-3Do eye-follow-P
"Karinganta nyurru-pala wurnturu-jarrija."
PP finish-3D far-INCO-P

'Then he watched them both go. "They are already a long way off."'

Karinganta is typically used to introduce an answer explaining the reason for actions when the reason has been questioned. This is shown in (43)-(45). In these sentences *karinganta* is perhaps best translated by English 'because' but *karinganta* does not contain as part of its semantic content a causal component. It is merely the juxtaposition of these types of sentences that leads necessarily to a 'because' translation in English. In Warlpiri, while the answer is understood as explaining the reason why, the role of *karinganta* is still to introduce a statement of fact 'known' to the speaker to be true, and authored by the speaker. This is apparent from (46) and (47) where the answer introduced by *karinganta* is not causally related to the question.

(43) Q: *Nyarrpa-rla ka-n-pala yulami?*

A: *Karinganta wangumarnanypa-lku waja-npa nyuntu-ju.*

Q: Why are you two crying?

A: Because you have lost your father.

(44) Q: *Nyarrpara-ngurlu-n-ku-lu yanurnu?*

A: *Karinganta-rna kali-puka jarri-nja-rla yanu-rnu.*

Q: Why have you come here?

A: It is because I have been widowed that I have come here.

(45) Q: *Nyiya-rla-nkulu ngurra nyampu-kujaku-ju yanu?*
A: *Karinganta pingi-kijaku-rna yanu.*
Q: What is it about this camp that has made you move away from it?
A: It is to get away from the ants that I have moved.

(46) Q: *Nyarrpara-wiyi yangkaju kurdu ngaju-nyangu-jarra?*
A: *Karinganta wurnturu-pala yanu — kurdu ngaju-nyangu-jarra.*
Q: Where are those two boys of mine?
A: They have gone far — those two boys of mine.

(47) Q: *Yuwa nyarrpa-manu-ngku-lu yalumpuju? Nyiya-rlu-ngku nyangu?*
A: *Karinganta ngaju-ju yinya-patu-rlu ngarrka-patu-rlu jiily-ngarrurnu mardukuja-ngurlu-kula.*
Q: Hey, what did they do to you over there? What happened to you?
A: Those men there accused me of taking a woman — that's what.

Karinganta can be also be used to introduce an imperative statement as in (48), given in answer to a question.

(48) Q: *Nyiya-rna-ngku kuja nyuntu-ku-ju yinyi?*
A: *Karinganta-ju nganayi yungka — nyilima.*
Q: What can I give you out of this lot?
A: I say, give me that... the liver.

By prefacing the order with *karinganta* the speaker asserts himself as the author of the command related to himself.

Similarly with a statement of immediate intention as in (49) *karinganta* serves as a reinforcement.

(49) *Karinganta karlipa ngalipa-kula yani, marrkarirra karli ngali*
PP IMPF-1PLin 1PLin-PREST go-nP b-in-1 IMPF-1Din 1Din
yani.
go-nonP
'I say, we here will go, we brother-in-laws will go together.'

In both (48) and (49) the declarative function of *karinganta* is most prominent.

Like *kari, karinganta* which is speaker centric is used as a time and role shifter in narrative text, as can be seen from (42) and from the following examples (50) and (51).

(50) *Ngulawarnuju, kala yijardu-juku nyangu. "Karinganta-ka*
after that RP true-CONS see-P PP-IMPF
yali-lki nguna-wu! yama-ngka!
there-SEQ lie-EMPH shade-LOC

'Then he really saw it. "I say, there it is lying there — in the shade."'

(51) *Kula-lu kuja wangka-yarla: "Karinganta jinta-juku-rna marda-*
NEG-3PL thus say-IRR PP one-CONS-1
marda-rni."
have-nonP
Kula-lu kuja wangka-yarla kamparru-warnu-patu-ju — lawa.
NEG-3PL thus say-IRR former-RESULT-D.PL-DEL — no

'They couldn't say like this: "I say, I'm going to have just one (wife)." Our forefathers couldn't talk that way — not at all.'

Whereas in (50) and (51) the use of *karinganta* signals a shift from the present narration time to story present time and from the narrator's direct speech to that of the story character reported or imitated by the narrator, in (52) the narrator uses *karinganta* to indicate a shift of focus — he inserts himself into the narrative in the 'Dear Reader' style by prefacing a statement implying that he is the author of that proposition, the truth of which is based on his (narrator's) knowledge, in contrast to the situation in the text in which the story characters mistakenly believe the old man to be blind.

(52) *Kamparru-juku kala pampa-jarrija...Karinganta kala-palangu*
former-CONS RP blind-INCO-P PP RP-3Do
ngilkingki nyangu. Lawa-lku nganta kala pampa-lku
sideways saw-P not-SEQ PP RP blind-SEQ
parntarri-ja.
crouch-P

'He became blind before they got there... I tell you however that he saw them out of the corner of his eye. He was not crouching there blind as they thought.'

Like *nganta* and *kari, karinganta* can be used in isolation as an exclamation typically signaling the presence or realization of the expected or sought after as in (53).

(53) *Karinganta-wu! Nyampu-kula yakiri.*
PP-EMPH this-PREST wet

'This is it! It's damp here.'

Because of the extrinsic context in which the utterance is made — that of people digging in a soakage in search of water — the exclamation *karinganta-wu!* signals the discovered presence of water by the speaker, as is made explicit by the following clause.

By using *karinganta* the speaker signals that he is the author of the statement or command thus prefaced. Thus it follows by implication that he asserts or claims that a proposition thus expressed is true.

2.5 *KULANGANTA*

While *kula* is a negative SP (it has very strict co-occurrence restrictions, e.g. it cannot combine with other SPs), by combining with *nganta* it has fused into a non-decomposable PP in the same way as *karinganta*.

The PP *kulanganta* signals that the proposition over which it has semantic scope is believed and claimed to be false by the speaker, but that either the speaker or another had previously believed it to be true or may be inclined to mistakenly believe it to be true. It is semantically equivalent, grosso modo, to the English 'I/he/she/they... thought that... (but)', 'it seemed that... (but)', 'as if/though'.

Kulanganta is always preposed to the word(s) expressing the proposition over which it has semantic scope.

(54) *Kulanganta-lpa-rna nyangu jirrama, kala jinta.*
PP-IMPF-1 saw two but one

'I thought I saw two, but it was only one.'

(55) *Kulanganta-npa yilya-yarla Alice Springs-kirra. Yangka-juka-npa*
PP-2 send-IRR A/S-ALL ANAPH-CONS-2
yilya-yarla.
send-IRR

'I thought you were going to send him to Alice Springs. You should have sent him.'

(56) *Kulanganta ngapa kapi wanti-yarla wiri pirrarni.*
PP water FUT fall-IRR big yesterday

'I thought that it would have rained heavily yesterday.'

(57) *Kulanganta-lpa yantarli nyinaja, kala lawa.*
PP-IMPF home sit-P but no

'I thought that he was at home, but he wasn't.'

(58) *Kulanganta-ka nyiya yangka kurlarda-piya wirnpirlinja-yani.*
PP-IMPF what ANAPH spear-like whistle-INF-go-nonP
Ngula-nya waripirapira-ju.
ANAPH-FOC whip snake-DEL

'You think it's something whistling past like a spear. That's a whip snake.'

(59) *Kulanganta kaji wantija.*
PP UNINS fell-P

'I thought he had fallen.'

When it is the initial constituent of a clause, *kulanganta* typically becomes the base of the auxiliary as in the above examples (54), (55), (57) and (58), or precedes the SP such as *kaji* in (59).

However *kulanganta* can be in non-initial position in a clause expressing more than one proposition, or where the scope of the PP only extends over a proposition expressed by part of the clause as in (60).

(60) *Kala yakarra-pardija yali kulanganta ngurrju, kala nyurnu*
RP awake-rise-P that PP good but dead
yalumpu-ju.
that-DEL

'That one got up as though he was fine (=alive), but he was dead.'

In (60) *kulanganta* has scope over the proposition 'that he was good (=alive)' expressed by the nominal *ngurrju.* The speaker is not denying the truth of the preceding proposition 'that one rose up'. The constrastive conjunction *kala* introduces a second clause which expresses the contrary propositon 'that he was dead' understood to be true, or claimed to be true by the speaker, since its opposite is false.

In sentences with *kulanganta,* as with *nganta,* it is left open to the addressee to interpret who actually held the belief deemed false by the speaker at the time of speaking. The implication by the speaker and the interpretation by the addressee can depend very heavily on extrinsic (pragmatic) information or context and/or contextual information contained in the larger discourse.

The speaker may imply, or it may be interpreted, that the proposition was such that it could be or could have been universally held to be true, i.e. by anyone, or a specific value or identity may be implied to the believer — the speaker or another. Only a knowledge of the context (discourse) and the extralinguistic context can lead to the correct identification of the original mistaken 'believer'. The English translation given for the examples above presupposes the availability of such information, each of the sentences being taken from larger discourses and/or from an observable or imagined real life context.

By prefacing the expressing of a proposition with *kulanganta,* the speaker claims that the proposition is false or known by him to be false at the time of speaking, although it was previously held to be true or is held by another to be true or may/might be held to be true.

2.6 *MARDA*

By using *marda* the speaker expresses his belief that a proposition may or may not be true. *Marda* expresses probability as opposed to certainty (*kari, karinganta, kulanganta*). *Marda* may precede (61) or follow (62) the clause over which it has semantic scope, or it may be contained in the clause either as the auxiliary base, preceding the auxiliary where the base is a SP, or it may appear elsewhere in the clause.

(61) *Marda maliki-rli pungu.*
PP dog-ERG killed.

'Perhaps the dog killed it.'

(62) *Jalangu kapu-lu kanyi-rni marda.*
today FUT-3PL bring-hither PP

'They'll bring it today perhaps.'

(63) *Kapu-rna jalangu marda yani tawunu-kurra.*
FUT-1 today PP go town-ALL

'Maybe I'll go to town today.'

(64) *Nyuntu-ku marda kapu-ngku turaki-ji yinyi.*
2-DAT PP FUT-2io truck-DEL give-nonP

'Perhaps he'll give you the truck.'

(65) *Ngurrju-lku marda ngarra-rlijarra nyina.*
good-SEQ PP FUT-1Dex be

'We will probably be fine then.'

(66) *Ngarra-rna marda jukurra-ju lawa-nyina-lku.*
FUT-1 PP tomorrow-DEL not-be-SEQ

'May-be I'll be no more tomorrow.'

By juxtaposing two contradictory propositions each in a clause/sentence containing *marda,* Warlpiri expresses as two probable but mutually exclusive possibilities what English expresses with the 'either...or' construction.

(67) *Kapu marda ngapa wantimi, marda lawa-rlangu.*
FUT PP water fall-nonP PP no-EX

'Perhaps it will rain today, perhaps it won't.'
'Either it will rain today or it won't.'

(68) Q: *Nyiya nyiya yaliji yapa?*

A: *Karija. Jungarrayi marda, Japanangka marda. Ngurrpa-rna ngaju-ju.*

Q: What is that person's skin name?

A: Search me. He's either Jungarrayi or Japanangka. I don't know.

(69) *Marda yapa-ngku pakarnu, marda wantija pama-jangka kujaka*
PP person-ERG hit-P PP fell-P grog-EL INST
jarntijarntinyja-yani wanarri.
limp-move-nonP leg

'Perhaps someone hit him or he fell down drunk because he is limping.'

As an interjection, *marda* serves to express a judgement about a preceding proposition typically uttered by another interlocutor, as in (70) and (71).

(70) Q: *Jalangu-nya ka-lu rdipi-mi-rni?*
today-FOC IMPF-3PL go-nonP-hither.

A: *Marda.*

Q: Are they coming today?

A: Perhaps.

(71) X: *Watiya-kujaku-lu nyina-ka, rampal-panti-rninja-kujaku —*
spear-AVOID-PL be-IMP mistake-spear-INF-AVOID
karlangka-kujaku-rlangu.
exchange-AVOID-EX

Y: *Yuwa marda. Yijardu-ja ngari.*
Yes PP true-DCL PP

X: Stay here in case you get speared by mistake, or in case they punish you because you're related to me.

Y: Yes perhaps. That's quite true.

While *marda* is speaker-centric in that it expresses the speaker's judgement of 'probability', it is neutral as to the 'authorship' of the proposition. Semantically and syntactically, *marda* as PP and INTJ are one and the same. We will see that the same is true of the PP *ngayi* 'just'. Thus a categorical distinction made according to phonological and morphological criteria does not necessarily correspond with one made according to other criteria.

2.7 *NGARI* ~ *NGAYI*

Ngayi is derived from *ngari* by a regular process of shift from *r* to *y* in Warlpiri. Both forms are used by older speakers seemingly in free variation, but most young speakers only use *ngayi*. The particle is typically placed first or second in a clause and can serve as the phonological base of the auxiliary.

Semantically *ngayi* limits the scope (inferentially) of a proposition or attentuates the force of a command in a way similar to the English adverb 'just'.

This is illustrated by the following examples.

(72) *Ngari ka-rna-ngku payirni.*
PP IMPF-1-2o ask-nonP

'I am just asking you.'

(73) *Kuja ngayi jurnta-yanu-ju-lu jarda-ngkarni.*
thus PP away-go-P-1o-3PL sleep-OBV

'They went away and left me just because I was asleep.'

(74) *Majungurlu-yani — yaruju ngari yangka ya-ninja-ku.*
Majungurlu-go-nonP fast PP ANAPH go-INF-DAT

'"Majungurlu-yani" is just to hurry away.'

(75) *Waparlku-lpa ngari wapaja. Kulanganta-lpa-lu wurramanji*
unaware-IMPF PP walk-P PP-IMPF-3PL camping out
ngari wapaja.
PP walk-P

'She was just walking unaware (of the real reason). She thought that they were just going to camp overnight.'

(76) *Ngayi jalangu-rlu-wiyi ma-nta!*
PP now-ERG-first get-IMP

'Just take hold of him for now.'

(77) *Yali ngayi wala-parri-ka!*
that PP try-IMP

'Just try it.'

(78) *Nyuntu ngayi-rla wangka-ya nyarrpa-japa-ngku wangka-mi.*
2 PP-3io speak-IMP how-?-2io speak-nonP

'Just go and ask him to see what he says to you.'

A clause containing *ngayi* can be prefixed by another PP such as *kulanganta* in (75). It can also precede another PP as in (79) where it precedes *nganta.*

(79) *Kula milpangku nyangu — lawa. Ngayi nganta-lpa rdaka-ngku*
NEG eye-ERG saw-P no PP PP-IMPF hand-ERG
kuja-rlu warru marnpurnu — Jampijinpa-rlu.
thus-ERG around feel-P Jampijinpa-ERG

'He couldn't see with his eyes at all. Jampijinpa made out that he only felt his away around with his hands like this.'

Both *marda* and *ngayi,* unlike the other particles that we have described in this section, can host a small number of temporal and quantitative enclitics such as *-lki* 'sequential', *-wiyi* 'first', *-jiki* 'constant' and *-puka* 'sole'.

(80) *Ngari-wiyi kapi-rna-ngku yi-nyi.*
PP-first FUT-1-2io give-nonP

'I'll just lend it to you.'

(81) *Kala nyanungu-ju-ka nyina marakata ngari-jiki.*
but 3-DEL-IMPF be opportunist PP-CONS

'But he is always just an opportunist.'

(82) *Ngari-lki-lpa-lu-jana yapa-ju paka-rnu.*
PP-SEQ-IMPF-3PL-3PLo people-DEL hit-P

'And then they just killed the people.'

Like *marda,* the PP *ngayi* can constitute the sole element of an utterance which presupposes a preceding utterance within the same discourse. The preceding utterance is typically spoken by a person other than the one who pronounces *ngayi* which has semantic scope over the preceding utterance. For example in (83) the first speaker questions the reason or motive behind the proposition 'that you came'. It is over this proposition then that the reply *ngayi* 'just' has semantic scope.

(83) X: *Nyiya-ku-npa ya-nu-rnu?*
what-DAT-2 move-P-hither

'Why did you come?'

Y: *Ngayi(-rna yanurnu).*
PP (- 1 come-P)

'No reason.'

There is another interjection *ngayi* which may be simply homophonous with the PP or which may be semantically related, although having a somewhat different meaning and pragmatic function. Spoken with a declarative intonation contour, the interjection *ngayi* indicates understanding of and/or agreement with a preceding proposition, especially where it contains information which is new to the listener who responds with *ngayi* as in (84) and (85).

(84) X: *Nyurru-lu ya-nu.*
complete-3PL move-P

'They've already gone.'

Y: *Ngayi.*

'Really.'

(85) X: *Karlarra-lku nganta-lu rdaku-ju pangu-rnu.*
west-SEQ PP-3PL dam-DEL dig-P

'They say they have dug a dam out west.'

Y: *Ngayi. Kulanganta yatijarra.*
Really. PP north

'Really, I thought it was north.'

Very often *ngayi* tends to be said twice in this 'acknowledgment of new information' function.

Pronounced with questioning intonation, *ngayi* is used to acknowledge the receipt of new information and at the same time question its truth, especially where it is contrary to a formerly held belief as in (85) or where it is not believed to be the truth as in (86).

(86) X: *Parraja-nganpa yu-ngka!*
coolamon-1PLexio give-IMP

'Give us the coolamons!'

Y: *Lawa waja.*
no PP

'I haven't got them, I tell you.'

X: *Ngayi? Kala nyiyarla-rlipa yurrpa-rninja-rla nga-rni waja?*
but what-LOC-1PLin grind-INF-PREC eat-nonP PP

'Really? Well what are we going to grind into to be able to eat, I ask.'

Ngayi ~ *Ngari* is used to delimit or minimise the deductive and inferential associations of the proposition over which it has semantic scope.

2.8 *NGARRA*[11]

Apart from the SP *ngarra* which when used as an auxiliary base with the non-past verb form as a future time marker, there is a PP *ngarra* which is used to give emphasis to a proposition, as in the following examples. Like other PPs it can be placed in clause initial or medial position.

(87) *Kula-rna ngarra nyarrpa-jarri-yarla-lku.*
NEG-1 PP how-INCO-IRR-SEQ

'I didn't really know what to do.'

(88) *Wati ngarra wangka-ja.*
man PP speak-P

'It was the man who spoke.'

Ngarra is used to emphasise the truth of a proposition where it is disputed by another or where the contrary proposition has been 'mistakenly' (from the speaker's point of view) held to be true. If, for example, the speaker of (88) had previously thought that it was a woman's voice that he had heard, and then on closer examination discovered that it was in fact a man (owner of the voice), then he would appropriately enunciate (88). Similarly if another interlocutor claimed that it was a woman, then the speaker would use *ngarra* as in (88) to stress the fact that he 'knew' that it was not a woman but a man.

Ngarra is also used in interrogative sentences such as (89) and (90). Different interrogative markers are used in each case, the particle *mayi* in (89) postposed to *ngarra* and the clitic *-nya* in (90) suffixed to *ngarra*.

(89) *Ngarra mayi yunpa-rninja-rla marda-rnu kuyu?*
PP ? sing-INF-PREC have-P meat

'Could it really be that he sang the meat and got it?'

(90) *Ngukara-wangu-lku-jala ka-lu wapaninjani kuja ngarra-nya?*
harmed-PRIV-SEQ-EMPH IMPF-3PL walking thus PP-?

'As I said they are now walking unharmed, is that really so?'

Ngarra is also used in imperative sentences such as (91) and (92) where the speaker seeks to persuade the addressee to act in a way contrary to the latter's desire.

(91) *Wiyarrpa-lu ngarra wangka-nja-parnta-ma-nta!*
poor thing-3PL PP speak-INF-with-CAUS-IMP

'Please allow her to speak poor thing.'

(92) *Kuyu-ku-lu ngarra pipi-rlangu ngarri-ya-nta waja.*
meat-DAT-3PL PP aunt+niece-pair go-IMP DECL

'Go and look for meat I say.'

2.9 *WAYI*

We do not have many examples of the PP *wayi* and consequently do not pretend to really understand its semantic content or pragmatic function. However, it appears to be used as a focus marker. It is typically placed before the clause or constituent which the speaker seeks to bring into focus. This is illustrated in (93) and (94).

(93) *Ngula-warnu-ju, wayi puluku, puluku-ku-wiyi-li-rla yaarl-kuju-rnu.*
ANAPH-RES-DEL PP bull bull-DAT-first-3PL-3io over-throw-P

'Then it was that bull. It was first over the top of the bull that they threw it.'

(94) *Wayi marda yirrakurnu yama-ngka ngapa-ku-ngarnti-rli.*
PP perhaps put-P shade-LOC water-DAT-before-ERG

'Ah perhaps she put it (baby) down in the shade before going for the water.'

Wayi is prefixed to a second person clitic (*-nta/-npa* 'singular', *-npala* 'dual', *-nkili* 'plural') to form an interjection used as an exclamation whose function is to attract the attention of the addressee(s).

(95) X: *Wayi-nta!* *Ya-ni-nya-rli jukurra-ju?*
PP-2 go-nonP-?-1Din tomorrow-DEL

'Hey you! Shall we both go hunting tomorrow?'

Y: *Yuwayi.* *Kapi-rli ya-ni.*
yes FUT-1Din go-nonP

'Yes, we will go.'

(96) X: *Ngari-jana-rla kuyu-parnta-ku nya-ngka!*
just-3PLo-io meat-with-DAT look-IMP

Y: *Ngarrka wayi-nta!* *Jina-marda-rni ka-rna — yantarli-rli*
man PP-2 see-have-nonP IMPF-1 camp-ERG
ka-rnalu panu-kari-rli jina-marda-rni.
IMPF-1PLex many-other-ERG see-have-nonP

X: *Yawu!* *Jina-marda-ka-lu panu-kari-rli.*
OK see-have-IMP-3PL many-other-ERG

X: Just look out for them because they have meat.

Y: Hey man. I am looking after it. We others are looking after it in the camp.

X: OK. You others keep an eye on it.

2.10 *KAPI/KAPU*

Kapi/kapu, which are variants, are used to question a proposition which is an alternative to or is contrary to a previously held or stated one. *Kapi* is often preposed to a clause over which it has semantic scope as in (97) and (98).

(97) *Yii!* *Nyiya-rla ka-rna manujurru-ju wanti-mi?* *Kapu yangka*
Oh! what-LOC IMPF-1 twitch-DEL fall-nonP PP ANAPH
purlka wayi maju-jarri-ji ngurra-ngka?
old man PP bad-INCO-FUT home-LOC

'Oh why are my muscles twitching? Could it be that the old man (father) is going to die back in the camp?'

(98) *Palka-nya papardi-puraji kapi ya-nu?*
present-? elder brother-2K PP go-P

'Is your brother here, or has he gone?'

(99) *Palka-nya papardi-puraji ya-nu kapi?*
present-? older brother go-P PP

'Is your brother here or has he left?'

As is seen from a comparison of (98) and (99), *kapi* can precede or follow the clause over which it has scope.

Used as the sole constituent of a clause, *kapi* is used to question a preceding proposition voiced by the same speaker, as in (100). It has the same semantic content and function as in (97-99).

(100) *Jalangu ka-npa ya-ni. Kapi?*
today IMPF-2 go-nonP PP

'You are going today. Or are you not?'

2.11 *MURRA*

Murra is similar in meaning to *nganta*. It signals that the information or proposition contained in the clause to which it is typically preposed has been reported to the speaker who is enunciating it second-hand.

(101) *Murra-npa-rla kuja makurnta-puraji-ki yanu-rnu, yarnka-ja-*
PP-2-3io thus m-in-1-2K-DAT go-P-hither, grab-P-
npa-rla.
2-3io

'I've heard that you have come to your mother-in-law and that you grabbed hold of her.'

(102) *Murra-ja ka-lu nga-rni kuyu. Ngurrju nganta.*
PP-EMPH IMPF-3PL eat-nonP meat good PP

'Reportedly they eat it for the meat. It's said to be good.'

Although *murra* is close in meaning to *nganta*, it seems to imply an affirmative belief in the proposition it prefaces whereas *nganta* tends more towards scepticism on the part of the speaker as we saw in 2.2.

There is an interjection *murraja* synonymous with *karija* which signals the speaker's ignorance of a proposition about which he is questioned directly or indirectly. It can also indicate the speaker's intention to remain uninvolved in the issue.

3. CONCLUSION

The number of particles in Warlpiri defined according to phonological and morphological criteria is quite large, as shown in chart 1. We have subcategorized them into four main divisions based on syntactic criteria. Further subdivisions could be made using further criteria.

We have attempted an examination of the propositional particles to examine their common syntactic and pragmatic roles.

Within a clause, the syntactic function of PPs is negligible. They are preposed or postposed to a clause or clausal constituent over which they have semantic scope or inserted into the clause after the first constituent, thus often becoming eligible for the role of auxiliary base.

A possible subcategorization of the PPs on syntactic grounds could be made such that the particles *marda* and *ngayi* which can host enclitics such as *-lki, -jiki* (§2.7) would be separated from the others which do not host any enclitics.

We have suggested that there is also a small subcategory of PPs not examined in this paper, viz. *kaji, mayi* and *waja,* which cannot appear clause initially. Because they can be postposed to the auxiliary they cannot be classified as enclitics. They are uninflected and can host the auxiliary clitics. For these reasons we are led to classify them as particles.[12]

While each PP has a definable 'meaning', that meaning relates to an accompanying 'proposition' and at the same time to the speaker. For this reason, PPs are basically shifters in Jakobsonian terms. While the meaning of a PP has scope over a proposition expressed by a clausal constituent or by an entire clause, it very often depends for part of its interpretation on a larger context — one provided by the discourse in which the PP is uttered or by the extra-linguistic context in which the speech act takes place.

The relation between a proposition and the speaker cannot be abstracted away from the 'meaning' of a PP, since its primary function is to signal the speaker's relation to the proposition at two levels: that of the actual authorship and that of commitment or belief to the truth of the proposition. In fact it is the particular relation between the speaker and the proposition which constitutes the 'meaning' of a PP.

Semantically it is this which distinguishes PPs from nouns, verbs and preverbs. Members of the latter categories have a denominative function, that is a given noun symbolizes a definable concept, action, event, entity... whereas PPs cannot be defined without reference to the speaker and the text. This is true of the other particles as well.

FOOTNOTES

1. This paper has developed out of one called 'Propositional Particles in Warlpiri' delivered at the Australian Linguistic Society meeting in Canberra in August 1981. Most of the examples given in this paper are taken from texts spoken or written by Warlpiri people. Others were written by Warlpiri colleagues especially to illustrate the particle in question. I am very grateful to Professor Kenneth Hale who has kindly put his field notes and transcriptions at my disposal. Some of the examples are taken from his materials. In writing this paper I was particularly helped by Leonard Granites Japanangka, June Walker Napanangka and Robin Granites Japanangka, and am most grateful for their insights, explanations and examples. I also benefited from discussion with David Nash. Any errors in this paper are of course my responsibility.

2. Like Crowley we draw together interjections and particles. According to the defining criteria we set up (§1), interjections form a subcategory of the larger category of particles.

3. For a full description of the auxiliary in Warlpiri see Nash (1980:58-62, 185-7) and Hale (1973).

4. 'Proposition' is used fairly freely in this paper to designate the semantic content or 'message' expressed by a clause or clausal constituent (word or group of words), and not just that type of semantic representation which can be said to be true or false.

5. *Ngurra* is typically used in Lander River Warlpiri, while *Kapi ~ kapu* is used in Southern Warlpiri.

6. Some speakers use *kalaka* where others use *kajika;* however, all speakers feel that while they are very similar in meaning, there is a slight difference.

7. Verbs belong to one of five conjugations marked by their suffixal inflections. The verbal inflectional paradigm for one of the conjugations is given as an illustration:

root —	inflection			
wangka-	*mi/∅*	'non-past'	*yarla*	'irrealis'
'speak'	*ja*	'past'	*nja*	'infinitive'
			nya	'presentative'
	ya	'imperative'	*ju/ji*	'future' (rare)

In south-west Warlpiri (bordering Pintubi country), verbs inflect for future tense, thus having a past, present, future split; however in modern Warlpiri, the future form is very rarely used, so that there is only a past, non-past distinction in the verbal inflections, for the 'realis' tenses. The aspectual affixes do not combine with the infinitive, imperative, presentative or future verb forms.

8. In modern Warlpiri, negative particles *nuu* (<Eng. 'not')and *nati* (<Eng. 'not') are often used instead of the Warlpiri negative SPs. They are classified as PPs since they combine with all verb forms and with all SPs except the negative ones, for which the former are substituted. These are not treated in this study.

9. *Winjarra/winjarni* is probably derived from the Warlmanpa verb *winja-ka* 'to leave behind' equivalent to the Warlpiri verb *yampi-mi* used in prohibitive imperative constructions (Nash 1979).

10. It was David Nash who suggested to me that obligatory hosting of auxiliary clitics might be a useful criterion to subcategorize particles in Warlpiri.

11. In Lajamanu Warlpiri as reproduced in Warlpiri readers produced by SIL under the direction of the late Lothar Jagst, *ngarra* is also used as an enclitic with an interrogative meaning akin to southern Warlpiri *mayi*.

12. A study of intonation and relative stress prominence needs to be undertaken before the question of subcategorization of syntactic categories can be properly treated in Warlpiri. For example when *nganta* is postposed to a word as in (102), it receives secondary stress on the initial syllable compared to that on the first syllable of the preceding word *ngurrju*. This is akin to the stress patterns on enclitics — these are stressed on the first syllable, but the stress is subordinated to the main stress on the first syllable of the complex word. Similarly the stress on *waja*, *kaji* and *mayi*, like for *nganta* in (102), is subordinated to that on the first syllable of the preceding word.

ABBREVIATIONS

1	First person
2	Second person
3	Third person
ALL	allative case
ANAPH	anaphoric
AVOID	avoid case
CAUS	causative
CONJ	conjunction
CONS	constant
CONT	continuous
D	dual number
DAT	dative case
DEC	declarative
DEL	delimiting
EL	elative case
EMPG	emphasis
ERG	ergative case
EX	example
ex	exclusive
FOC	focus
FUT	future
IMP	imperative
IMPF	imperfective aspect
in	inclusive
INCO	incohative
INF	infinitive
INST	instantiated
INTJ	interjection
io	indirect object
IRR	irrealis
LOC	locative case
NEG	negative
nonP	non-past
o	object
OBV	obviative
P	past
PL	plural number
PP	propositional particle
PREC	preceding
PREST	presentational
PRIV	privative
SEQ	sequential
SP	sentential particle
UNINST	uninstantiated

NOTE In glossing the auxiliary clitics, neither the singular number nor the subject is marked.

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WARLPIRI VERB ROOTS AND PREVERBS

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This paper considers the range of verbal words in the Warlpiri language of the west-central Northern Territory, and compares the inventory of verb roots in Warlpiri with that of some closely related languages. This necessarily involves the related category of 'preverb', discussed in detail for Warlpiri in section 2.[1]

The paper shows how preverbs bring out a covert distinction between two sorts of Warlpiri verb root — (i) those which occur in a number of lexical stems (i.e. in combination with a number of 'lexical preverbs'), and (ii) those which do not. It is shown that roots of type (i) are in general to be regarded as more ancient than roots of type (ii), as shown for instance by the much higher correspondences between roots of type (i) and verb roots in the languages to the north and west of Warlpiri. Another aspect of the preverb-verb combination is that it has given rise to new verb roots, synchronically simple as the result of reanalysis of a semantic-morphological disparity.

0. INTRODUCTION

The primary elements of certain complex verbs may be referred to as 'preverb' (following Hale 1973b:453-55 for Warlpiri) and 'verb stem', so that the complex verb of the relevant type has the following structure:

$$[\text{preverb } [\text{root-inflexion}]_V\,]_V$$

-----stem-----

In Warlpiri, such a structure is justified phonologically and morphologically, though the units are not always semantic units. As will be seen below, particularly in section 2.3, the lexical entry for a complex verb may assign a meaning to the 'theme' consisting of preverb and root, which combines semantically with the tense/aspect inflexional suffix.

Another definition of 'preverb' relies on the Auxiliary category (Capell's 'catalytic auxiliary') found in Warlpiri and its neighbors. The Auxiliary constituent occurs only initially or in second position in the sentence, and so it is possible in these languages to propose the following:

> A preverb is a morpheme which combines with a verb to form a unit which may occur at the beginning of a sentence, immediately preceding the Auxiliary (and may also occur in other contexts as well).

Such a definition is applicable in Warlmanpa, Walmatjari, and probably also in Gurindji and Warumungu. In discussing languages further afield, the term 'preverb' may be used more generally, as will be seen below.

The topic 'simple and compound verbs: conjugation by auxiliaries in Australian verbal systems' was one of the foci of the A.I.A.S. 1974 Biennial Conference (see Dixon, ed. 1976:613-768). Perhaps because of a confusion concerning the terms 'auxiliary' vs. 'catalyst' (mentioned in the introduction, Dixon, ed. 1976:14), the Warlpiri language was classified by the rapporteur in terms of its 'catalytic auxiliary' (Capell 1976:617-18).[2] However, Warlpiri also has complex verbs parallel to those of Walmatjari, described by Joyce Hudson in the same session, and these in turn are similar to the complex verbs in a number of languages of northern Australia: see papers by Heath, Kofod and Sharpe in Dixon, ed. 1976. Thus, the earlier notion that

> the structuring of a verb from an invariant verb root and an auxiliary verb is a phenomenon not shared by a very large number of Australian languages (Sharpe 1972:vii)

depended on a restricted definition of 'auxiliary'. With the greatly increased amount of grammatical information that has become available over the last decade, it is possible to perceive an areal continuum in the structure of the verbal word, as summarised by Dixon (1980:280-81, section 9.4.3 Number of verbs): a number of Australian languages, particularly in the east of the continent, have hundreds of mono-morphemic verb roots, whereas the same range of verbal ideas is expressed mostly by complex verbs in a number of other Australian languages, particularly in the west of the continent.

Heath (1976:735) distinguishes between two complex verb structures in different north-east Arnhem Land languages, both of which might be described as 'an uninflected main verb bound to a following inflected auxiliary' (Heath 1978:88 on Ngandi and 'most languages in the area'):

(i) [root - thematising suffix - suffixes]
(ii) [verb][pronominals-auxiliary-suffixes].

Heath finds (i) in Mara, Alawa, Warndarang and Yugul, and (ii) in Nunggubuyu, Ngandi, and the Yuulngu languages (such as Ritharngu). Merlan (to appear:8-9) distinguishes two types of complex verb within Mangarrayi. These Arnhem Land languages fall into the 'complex verb' area of the Australian continent. Dixon exemplifies the distribution with Dyirbal (hundreds of mono-morphemic roots) from the east on the one hand,[3] and mentions on the other Warlpiri, Walmatjari, Gurindji (Kuurrinyji) and languages of 'Kimberleys and Daly River'. He notes that Diyari (north-east South Australia) has over 200 verb roots: Austin (1981a:71) records 248 verb roots in that language. It can be added that Yidiny (293 roots, according to Dixon 1977:207), Ngiyambaa (Donaldson 1980), Lardil (Hale 1981), and the Arandic languages of central Australia (K. Hale, p.c.), also exemplify the 'eastern' property of having hundreds of verb roots. On the other hand, Warlpiri's eastern neighbour Warumungu has around 50 verb roots (Simpson 1980); Jaru, with 'only forty odd verbs' (Tsunoda 1978:79) follows the pattern of its neighbours Warlpiri and Walmatjari. In his account of preverbs in Jaru, Tsunoda (1978:199) mentions parallels in the Pama-Nyungan languages Malngin, Wandijira and Walmatjari, and the non-Pama-Nyungan Gidja, Miriwung, Wunambal and Ungarinjin.

The qualitative statistical situation in Nyangumarda is typical:

> by dictionary count, simple, i.e. monomorphemic, verbs number barely one hundred, while complex verbs are many times more numerous; by text count, the scales are tipped the other way: simple verbs far outnumber complex. (O'Grady 1970:49)

In this respect, Warlpiri is numerically intermediate between the languages to its north and north-west (with no more than 45 or so verb roots) and the languages to its south and east (with many hundreds of verb roots), for the current dictionary shows around 115 roots.[4] It is striking that even the language most closely related to Warlpiri — Warlmanpa — has just over 40 verb roots. I propose that the discrepancy is in part attributable to Warlpiri's recent acquisition of a number of additional verb roots.

Near the other numerical extreme is the Daly River language Malak-malak, which exhibits 'conjugation by 6 auxiliaries'. There are a couple of complications to a straightforward comparison between the 'auxiliaries' of Malak-malak and the verb roots of languages to its south, since each auxiliary has a number of stems that supplete with the tense/aspect categories, and it is unclear how the semantic categories governing auxiliary choice are related to the putative etymologies of the auxiliary roots. However, it is interesting to note at this stage the semantic range covered by each auxiliary, particularly as indicated by its meaning when it occurs as an independent verb:[5]

conjugation	meaning
1	(none identifiable; dependent only)
2	movement, distal, copula
3	movement, iterative
4	sitting, proximate
5	lying, distal
6	standing, proximate

Another morphophonemically complex situation occurs in Ungarinjin in the Kimberleys, but the verbal inventory shows much more similarity with those of Pama-Nyungan languages to the south:

> The set of roots on which all compound verbs are based (i.e. those whose inflected forms can serve as auxiliary verbs) is closed and quite small, numbering fourteen. Of these fourteen, all but two, /-wu/ and /-yinde/ ... sometimes also occur in isolation as 'simple verbs'. (Rumsey 1978:108)

The roots used exclusively as simple verbs number 'several thousand' and fall into 7 conjugations (though the 'vast majority' of non-compounding roots fall into the conjugation containing 8 of the 14 auxiliaries) — Rumsey (1978:151).

The wider Australian correspondences proposed thus comprise the following terms used by other workers:

LANGUAGE		
Warlpiri, Jaru	root	preverb
Walmatjari	Root 2	Root 1
Ungarinjin	auxiliary	simple root
Malak-malak	auxiliary	verb
Alawa	auxiliary	particle
Yirr'-Yorront	verb root	prefix

Of course, the properties of the categories vary from language to language — in the foregoing discussion my aim has been to draw out the similarities.

1. SOME ISSUES RELEVANT TO PREVERBS

1.1 TYPOLOGICAL PARALLELS

Indo-European:

The term 'preverb' has long been used by Indo-Europeanists, dating at least from Varo (praeverbum). The term refers to particles which appear following a noun (like a postposition) and simultaneously before the verb, and which, in early Indo-European, were typically spatial adverbials (such as 'up, down, away'). These forms are the antecedents of German (separable and inseparable) verbal prefixes.[6] Tsunoda (1978:199) makes a comparison between preverbs in Jaru (and neighbouring languages) and the German *Vorsilben*, i.e. separable (verbal) prefixes. Russian verbal prefixes are also similar — Pesetsky (1979) argues that in morphological structure they are the sister of the inflected verb root (rather than being a sister of the bare root). Williams (1981: 270) draws attention tu compound Latin verbs like *ludificio* 'to make game, to play'.

English:

English phrasal verbs (verb-particle constructions) are similar to preverb-verb constructions in two ways (hense Alpher's [1973:403-6] and Capell's [1976:624] use of the term 'phrasal verbs' for certain complex verbs in Cape York languages). A phrasal verb has a meaning that is not simply a composition of the verb and the preposition (particle); and the verb and particle may form what has been called a 'discontinuous constituent' in that other words, such as pronouns, can intervene between the root and the particle.

Hindi:

Hindi forms compound verbs consisting of an uninflected verb root (called the 'main verb') followed by an inflected verb root (called by some the 'vector verb' or 'auxiliary'). It is interesting to compare the semantics of this basic set of Hindi verbs with that of the Australian verb roots classified in section 3, and so I list them here.

Only a fraction of Hindi verb roots may be the second (vector) verb in a compound verb, and it is not completely clear which verbs are to be classified as possible vector verbs. All 23 authors listed by Hook (1974:19-20) in his comprehensive study of Hindi compound verbs agree that the following 6 roots are vector verbs (using Hook's orthography):

baiTh	'sit down'
de	'give'
jaa	'go'
le	'take'
paR	'fall'
uTh	'get up, rise'

and Hook (1974:119-20) would add the following 18:

aa	'come'
cal	'walk, go'
choR (de)	'leave behind'
cuk	'run out, be used up; be paid off'
Daal	'throw'
dhar	'put; throw; keep'
kharə ho	'stand up'
le jaa	'take away'
maar	'strike; kill'
mar	'die'
nikaal	'take out'
nikal	'come out; go out; turn out'
paa	'find, get' (anti-vector)
rah	'stay, remain'
rakh (de)	'put down'
sak	'can, be able' (anti-vector)

Georgian:

Merlan (1980a:10) points out a similarity between German verbal prefixes and the 'preverbs' of Georgian, particularly 'in earlier stages of the language'. Georgian preverbs typically mark aspect; certain Warlpiri preverbs, such as the 'quantifier' preverbs (section 2.4.1), have an aspect-marking function.

Algonquian:

Bloomfield (1940:103), no doubt taking the term from Indo-European studies, dubbed as 'preverbs' the pre-verbal particles found in Algonquian languages of North America.

> Certain particles, <u>preverbs</u>, freely precede verb stems... /kees/ "completion," /pes/ (used only as a preverb) "hither"... Particles and even longer words are often <u>included</u> between the members of such compounds: M[enomini] nekees-pes-[teh-wenah]-neewaaw "but I did see him on the way," with /teh wenah/ "however" included.

Goddard (1979:60) assigns a structure to the complex verb, and he apparently faced analytical problems similar to those posed by Warlpiri preverb-verb combinations:

> The basic structure of a [Delaware] verb form may accordingly be represented by the following diagram:

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|prefix|
|  or  |-(preverb(s) ) root(+medial)+final-endings
|change|
                           ---basic stem------

            -------compound stem-------------
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> (the plusses are stem-internal; the dashes separate the stem from the affixes; the space is a word boundary, though indicated by a hyphen in the transcription used [by Goddard].)

In other words, Goddard places a stem-internal word boundary between the preverb and the following verb stem. He does this because 'independent words may occur between a perverb and the rest of a compound stem' and 'preverbs and basic stems — with a prefix or change, if any — are each treated phonologically as an independent word' (1979:59), yet the compound stem is the unit to which a prefix or change is applied. This analytical paradox is addressed in the next section.

1.2 MORPHOLOGICAL STRUCTURE OF SUFFIXED COMPOUNDS

I propose to analyse Warlpiri compound verbs as consisting of a preverb compounded with an inflected verb stem, even if the preverb-stem combination merits its own lexical entry. Thus the part of a compound verb preceding its inflexional suffix, a unit I am calling a 'theme', is not a morphological constituent of the complex word of which it is a part.

The situation is in these respects parallel not only to the Algonquian complex verbs mentioned at the end of 1.1, but also to certain English derived nominals as in the following example (cf. Levi 1978:66-74):

[transformational grammar]-ian

-----compound stem------- N

The paradoxical nature of such a structure is that two words appear to make up one stem (which thus takes stem affixes). There is, however, another way of analysing these structures. In this view, the morphological structure is simpler, such as in

$[\text{transformational}]_A\ \ [\text{grammar}]_N\text{ian}]_N$

----related lexical entry----

(where A=Adjective, N=Noun) and the meaning of the complex form, if it is to be related compositionally to the meaning of its parts, employs units which do not always correspond to morphological structure. Thus, in the above example, 'transformational grammar' is not a morphological constitutent in 'transformational grammarian', but it is involved (in some unspecified manner, relying on the fact that there is another lexical entry 'transformational grammar') in deducing the meaning of 'transformational grammarian'. Which structure is justified for so-called adjective-noun compounds in English has been the subject of recent research in morphology (e.g. Levi 1978, Allen 1978), which is relevant here because the Warlpiri preverb-verb combination has a similar structure. Of course, '-ian' is a derivational suffix, but this does not affect the parallel with inflexional suffixes. English examples such as 'white-washed' raise the same problem (Williams 1981).

It is difficult to see any alternative to having as the head of a lexical entry an entity, the 'theme', which is not a morphological constituent of a word in which it occurs. The 'theme' is readily identifiable within Williams (1981) theory of lexical relatedness: it is that part of a word remaining when the inflexion (the 'head' of the word, in Williams' theory) is deleted. Williams shows how this resolves '# inside +' paradoxes in English and Latin, and also mentions (1981:279) the application to Russian and Warlpiri. In addition, Warlpiri phonology motivates the right-branching compound verb structure. Processes of vowel assimilation, and stress assignment, operate generally in domains beginning at each morphological '[' and extending rightward to the next '[' (passing over any number of ']')— see Nash (1980) for exemplification, for instance in reduplications and nominal compounds. Given that an inflected compound verb has structure

[preverb [root-inflexion]]

the phonological processes of vowel assimilation and stress apply without any additional restrictions on them. This would not be so if compound verbs had the structure

[[preverb-root] inflexion]

See also section 2.3.

2. PREVERBS IN WARLPIRI

This section presents details of the preverb category in Warlpiri. An understanding of the ways preverbs combine with verbs is required to understand the following section which distinguishes Warlpiri verb roots on the basis of their interaction with preverbs. For further details, particularly of phonology and morphology, see Nash (1980) and the references there.

2.1 SEMI-PRODUCTIVE PREVERBS

A typical Warlpiri preverb is /pirri/ 'scatter', occurring in such verbs as the following (with the meaning of the root given in square brackets after the meaning of the complex verb):[7]

pirri-kiji-rni	'ERG scatter ABS (by throwing ABS), ERG broadcast ABS' [throw]
pirri-mati-rni	'ABS (eyes) bulge out' [go in line]
pirri-nguna-mi	'ABS lie down individually, scattered' [lie down]
pirri-panti-rni	'ERG pierce, squash ABS and send flying' [spear]
pirri-parnka-mi	'ABS fun away and scatter' [run]
pirri-ya-ni	'ABS disperse' [go]
pirri-yi-nyi	'ERG distribute ABS (to DAT)' [give]

Another is /rdilyki/ (eastern alternant /tilykirr/) 'breaking', as in:

rdilyki-pi-nyi tilykirr-pi-nyi [E]	'ERG break ABS' [act on]
rdilyki-ya-ni	'ABS break' [go]
rdilyki-paka-rni tilykirr- [E]	'ERG smash ABS to pieces' [hit]
rdilyki-kati-rni	'ERG step on ABS breaking it' [step on]
rdilyki-luwa-rni	'ERG hit ABS, breaking it' [hit]
rdilyki-paji-rni	'ERG break ABS' [cut]
rdilyki-panti-rni	'ERG break off (spear) in ABS' [pierce]

and two further compounds which are apparently specialised:

rdilyki-kiji-rni	'ERG (horse) throws ABS' [throw]
rdilyki-wangka-mi	'ABS (cooked meat) break into pieces' [speak]

A third is /milki/ 'demonstrating, so as to give an example', as in:

milki-purla-mi	'ABS demonstrate a call; ABS shout to make presence known' [shout]
milki-purra-mi milki-yingki-rni	'ERG light warning fire (ABS)' [burn; make fire]
milki-wangka-mi	'ABS demonstrate speech' [speak]
milki-yirra-rni	'ERG show ABS to DAT (?)' [put]

As may be seen in some of these examples, the preverb-verb combination sometimes has a more specialised meaning (optionally) than a simple composition of the meaning of the preverb and of the verb root. However. these 'semi-productive' preverbs apparently occur with any verb root with which it would make sense to combine them, even if the root occurs in no lexical preverb combinations (see section 2.2), and for this reason I call them 'semi-productive'. Each has its own lexical entry and is associated with a rule specifying how to combine its meaning (definition) with the meaning of a verb with which it is combined.

These preverbs may only occur with a verb stem which is a lexical entry: a verb root, or a lexical preverb-verb combination, but not a stem which is itself a (non-lexical) preverb-verb combination (cf. productive preverbs, 2.4).[8] Furthermore, like all non-derived preverbs, they do not take any nominal or verbal inflexion, and do not occur uncombined with a verb root. Examples include:[9]

jaa	open (of entrance)
jaalypa	whispering
jamparl	chomping
jurnpu	pile up
kanginy(pa)	misperceiving
karlirr(-karlirr)	swerving
larra	splitting
manyu	in play
milki	demonstrating
paarr(pa)	into flight
parri	mashing
pirri	distributing, scattering
raa	clearing
rdilyki tilykirr [E]	breaking
rdungkurr	dislodging, removing
tiirl, tirl	splitting, cracking
turluny	bent double
walyi	spilling
wanyany	adhering
warurrka	noisily
wirrpiyi	gathering (people)
warlka	feigning

An example of a semi-productive preverb in combination with a stem which is a lexical preverb-verb combination is:

/kanginy-purda-nya-nyi/ 'ERG fail to hear ABS properly'
(cf. /purda-nya-nyi/ 'ERG hear ABS')

2.2 LEXICAL PREVERBS

Some preverbs have an identifiable meaning, but occur with only a couple of verbs. An example is perhaps /ngirrily/ 'teasingly' as recorded in:

ngirrily-nyina-mi	'ABS flit around (people (DAT))' [sit, be]
ngirrily-ngirrily-wangka-mi	'ABS bait, talk sarcastically' [speak]

or /ngardaly/ 'turn over', recorded in:

ngardaly-kiji-rni	'ERG turn ABS over' [throw]
ngardaly-wanti-mi	'ABS turn over, roll over' [fall]

Others may occur with only one or two verb roots and affect the meaning of the root to such an extent that it is difficult to assign an isolable meaning to the preverb. An example is /wurru/, which combines only with two roots:

wurru-ka-nyi	'ABS stalk DAT, ERG stalk DAT' [transport, go with]
wurru-marda-rni	'ERG keep ABS out of sight, ERG hide ABS' [have]

Apparently /wurru/ has something to do with seclusion (cf. the adverbial preverb /wuruly(pa)/ 'into seclusion'). However, with our current knowledge of Warlpiri, there is no basis on which to predict that the notion of 'cause another to accompany' will be played down or omitted from the contribution of /ka-nyi/ to /wurru-ka-nyi/, leaving its contribution as just that of a general verb of motion (though perhaps it is relevant to the sense that the movement of the stalker accompanies, albeit at a distance, the movement of the quarry). Hence /wurru-ka-nyi/ requires its own lexical entry: the combination /wurru-ka-nyi/ is the head of a lexical entry distinct from the lexical entry headed by /ka-nyi/, and there is probably no lexical entry headed simply /wurru/.[10]

Another example is /yirri/, found in:

yirri-ka-nyi	'ERG make ABS itch' [transport]
yirri-kiji-rni	'ERG startle ABS; ERG set ABS onto DAT'(e.g. to sick dogs onto) [throw]

A lexical preverb is the only type of preverb which occurs as part of a lexical entry with a verb root — all other preverbs are in some way 'productive', and have their own lexical entries rather than occuring with particular roots in lexical entries. A number of the properties of lexical preverbs follow from this, e.g. (i) the fact that an Auxiliary may not occur between a lexical preverb and a root; (ii) the fact that a lexical preverb cannot occur following its associated root (or removed from it); (iii) the fact that the only preverb-verb combinations which occur with 'semi-productive' preverbs are combinations involving lexical preverbs (section 2.1), which otherwise only occur with verb roots in their scope.

2.3 SEMANTIC COMPOSITIONALITY

A preverb usually goes to form a compound verb which is a hyponym of the root verb — the preverb adds a component of meaning to the meaning of the root. Sometimes, as noted above, the combination may have a specialised meaning which is even more particular than the 'sum' of the meanings of the preverb and verb root, but of course this does not detract from the combination from being a hyponym of the root.

But hyponymy does not always hold for lexicalised combinations: it can fail to hold in a variety of ways. If a root has multiple senses, the more general senses tend to show up in verbs compounded from that root. Often it appears that one component of the meaning of the root is 'washed out', or 'diluted'[11] leaving other aspects of the root's meaning intact. I illustrate this in 2.6 with a presentation of all complex verbs involving the root /yi-nyi/ 'to give'. Further examples include the one involving /ka-nyi/ mentioned in 2.2 above, and a number of verbs built on /nga-rni/ 'ERG ingest ABS' which 'wash out' the component 'swallow' from its meaning, but retain 'act on by mouth'.[12] For example, /jamparl-nga-rni/ 'to chew', or 'to crunch with mouth' are actions which do not necessarily involve swallowing. Similarly, /purda-nya-nyi/ 'ERG hear ABS' retains the notion of perception in the root /nya-nyi/ 'ERG see ABS'.

There are indications that failure of compositionality is not limited entirely to the lexical preverbs. For instance, a derived or productive preverb might enter into a lexicalised combination which is no longer a hyponym of the root verb (perhaps because the meaning of the combination has changed over time, or because the meaning of the root has changed). A case in point may be the root /karri-mi/ 'ABS stand' which enters into some combinations to which its contribution appears to be no more than 'to be', (cf. the apparent cognate verb root /karri-/ in Gurindji, Jaru, meaning 'to be, sit') as in

jaamalamala-karri-mi	'ABS yawn'
rdilypirr-karri-mi (cf. rdilypirrpa 'hole, wound')	'ABS be bitten, wounded'
rdumurdumu-karri-mi	'1. ABS (heart) beat; 2. ABS worry about DAT'
manyu-karri-mi	'ABS play'

It is interesting to note that Warlpiri Sign Language verbs apparently may involve the same sort of dilution of root meaning. Kendon (1980:107) records that:

> To sign "play" one signs a compound, the second sign of the compound being the sign for /karri-mi/. Here, thus, the root structure of a complex spoken expression is translated into sign simply by compounding the sign versions of the roots of which the compound is constructed.

Most of the roots listed in section 3.1, but no others, are susceptible to this dilution and generalisation when they combine with preverbs — I indicate in the list in section 3.1 which roots particularly evidence dilution. It is rare that the change in meaning is so great that the case frame of the preverb-verb combination does not contain that of the root verb. Leaving aside the superficial instances analysed as homophonous roots (/-nga-rni/ 'ABS move', and /-ma-ni/ 'ABS make noise'), the only examples are /wurruka-nyi/ 'ABS stalk DAT; ERG stalk DAT';(mentioned in section 2.2) and the handful of etymologically 'incorporated object' verbs of bodily function.

In fact, certain 'linking irregularities' (see Nash 1980:Chap.6) may be attributed to the persistence of the case-frame of the root verb, as is seen in the pair

/kanginypa-nya-nyi/	'ERG fail to see ABS'
/kanginypa-karri-mi/	'ABS fail to perceive DAT'.

From the meaning of these two verbs, and the semantic roles of the arguments, one would expect that these two verbs would have the same case frame — probably 'ERG—ABS'. Yet, it seems, since /karri-mi/ has its subject argument linked to the 'ABS' case, the compound /kanginypa-karri-mi/ does also.

Note that there are few known instances of a difference in the linking of the subject argument between a verb root and a preverb combination involving that root. The few examples involve a root with ERG-linked subject, which occurs with a 'lexical' preverb to form a compound verb with ABS-linked subject.[13] The instances are as follows, with the frame of the root given in square brakets:

/kuumarri-yi-nyi/	'ABS moan, groan' [ERG give ABS to DAT]
/wurru-ka-nyi/ } /yura-ka-nyi/ }	'ABS stalk DAT' [ERG transport ABS]

The generalisation is also illustrated (negatively) by the pair of verbs just quoted, since both verbs involve a 'semi-productive' preverb, not a 'lexical' one, and thus the case-frame of the root persists in the compound. This situation should not be surprising: unless a preverb-verb combination merits its own lexical entry, its case frame (and meaning) is known only through general rules (albeit 'lexical rules').

There is another way to observe semantic composition of certain preverb-verb combinations: when the meanings (and case-frames) of two verbs fuse to form one. This happens in two ways in Warlpiri:
(i) The Infinitive of any verb V may combine in preverb-like fashion with the root /ya-ni/ 'ABS go' (and certain other motion verbs, such as /parnka-mi/ 'ABS run') to form the compound verb /V-INF-ya-ni/ 'go along V-ing'.
(ii) The Infinitive of one of the four verbs of stance may combine in a preverb-like fashion with the root /yirra-rni/ 'ERG place ABS (at ALL)' to form the compound verb /V-INF-yirra-rni/ 'ERG put ABS in V-ing position'.

Notice that in (i), the derived verb has the case-frame of the modifier, the verb V acting as preverb — thus /paka-rninja-ya-ni/ 'ERG go along striking ABS' — whereas in (ii) the verb has the case-frame of the head verb. In terms of case-frames, the combinations are as follows:

(i) (ERG-)ABS(-DAT) + ABS —> (ERG-)ABS(-DAT)
ERG-DAT + ABS —> ERG-DAT
(ii) ABS + ERG-ABS —> ERG-ABS

It is possible to make the generalisation that the argument of the 'head' (finite) verb which bears the role of Theme (usually linked, as here, to the ABS case) corresponds to the subject argument of the 'modifier' verb (the Infinitive-preverb) and takes the case of the subject of the 'modifier', while the remaining arguments are not affected. The notion 'subject' employed is the usual one in Warlpiri (that relevant to person-number marking, and infinitival control).

The generalisation extends, with respect to the 'going' construction (i), to the Warlpiri verbs with case-frame ABS-ABS ('cognate object' verbs, see Nash 1980:196-97) or ERG ('incorporated object' verbs, see Nash 1980:201), and to the following lexicalised combinations:

[parntarri-nja]-wanti-mi 'ABS stoop'
(related to /parntarri-mi/ 'ABS crouch', /wanti-mi/ 'ABS fall')

[yula-nja-ku]-ma-ni 'ERG make ABS cry'
(related to /yula-mi/ 'ABS cry', Purposive /-ku/ and the Causative /-ma-ni/; pointed out to me by Ken Hale)

2.4 PRODUCTIVE PREVERB-VERB COMBINATIONS

2.4.1 ADVERBIAL PREVERBS

The adverbial and dative-adjunct preverbs are distinguished by their ability to combine with a verb which is itself a non-lexical preverb-verb combination. But first note that they can, like semi-productive preverbs, combine with a lexical preverb-verb combination, as /jaala/ and /warru/ do in

jaala juurl-juurl-pi-nyi	'ABS jump back and forth'
warru kupaly-(w)anti-mi	'ABS swarm, flock around'

The greater combinatory power of adverbial preverbs is exemplified in the following sentence:

Ngapa wiri-ngki-nganpa pina lani-ma-ni wirlinyi-
rain big -Erg -1plo back afraid-Caus-Npast hunting-

wijaku.
NegPurp

'The big rain will deter us from hunting.'

Here, the productively formed /lani-ma-ni/ (cf. /lani/ 'fear') is in combination with the adverbial preverb /pina/ 'back, in return'. Another example, this time with the adverbial preverb sentence-finally and separated from the verb, is

Jinjin-(y)u-ngu-lpa-npa-ju ngaju-ku warrarda.
-give-Past-Imp-2s-1o I-Dat always

'You told me [to get stuff for you] all the time.'

Similarly, /jurnta/ (treated in 2.4.2) and /yarda/ in

Yirlangkiti-ji jurnta-kuju-rnu yarda.
blanket-me(Dat) -throw-Past again

'He threw off (from me) my blanket again.'

The ability to combine with a complex verb apparently goes hand in hand with another property showing that the 'adverbial' and 'dative-adjunct' preverb is rather loosely connected with the verb stem with which it combines, viz. the ability of 'adverbial' and 'dative-adjunct' preverbs (but not the 'semi-productive' or 'lexical' preverbs) to follow rather than precede the accompanying verb stem, thus:

$$[(\text{preverb})\ \text{root-inflecion}]]_{V}\ [\text{preverb}]$$

In fact, these preverbs sometimes occur even further separated from the main verb, under conditions which I do not understand. As the example of /warrarda/ above shows, such separated preverbs, to the extent that they occur, often occur sentence-finally.

Other adverbial preverbs include:[14]

jaala	back and forth
jaantaku	protruding
jaarl	blocking
jangkardu	in opposition to DAT
japara	eating while going along
jarrwara	wrong direction, astray
jawirri	V and leave behind
jayirrpa	snatching
jiwirlki-2	with appendage bouncing
juka	jutting upwards
julyurl(pa)	in(to) water, fire
juru-juru	rolling, sliding
juul(pa)	up to a point, halfway
laja	carrying
nganjini	on arrival
pina	back, in return
pirriki	in pity
pulpurru	in opposition to DAT
rarra	dragging
rdalji	motionless
wajili	running

wapa(pa)	V in search of
wapirdi	on arrival, approach of
warlku	feigning
warru(kirdikirdi)	around, in a circle
yaarl(pa)	on, over top of DAT
yungka	blithely

and the quantifier preverbs:

jarnku, palju	each
kutu	anything, anywhere, anyhow
puta	some, partly
muku	all, completely
warrarda	always, consistently
yarda	more, again

The degree of productivity separating 'semi-productive' from 'adverbial' preverbs may not be anything more than a difference of degree, and may well be an artifact of incomplete data. At this stage we cannot do much better than observe that 'adverbial' and 'dative-adjunct' preverbs have been recorded in combination with verbs that are preverb-verb combinations, and that 'semi-productive' preverbs have not; and that it is generally 'semi-productive' (and 'lexical') preverbs that enter into combinations whose semantics is not entirely compositional.

Adverbial preverbs, and preverbs in general, are distinguished from adverbs in two respects:

(a) the inability of preverbs to take any nominal inflexions — an adverb, such as /yaruju/ 'quickly', is like a Nominal in that it may take an Ergative suffix, as in

Yaruju-rlu-ju paka-rnu. 'He hit me quickly.'
quickly-Erg-me-hit-Past

Note, however, that it may be that some adverbial preverbs listed above are also to be classified as adverbs, in which case the next property, (b), is the sole deciding one.

(b) the ability of preverbs to form a unit with the following verb root, which may be a pre-Auxiliary unit in the sentence, vs. the inability of a 'true adverb' or any Nominal to do so (unless it acts as a derived preverb).

2.4.2 DATIVE-ADJUNCT PREVERBS

This sub-category of preverbs is called 'dative-adjunct' since its members introduce an extra argument, always linked to DAT case, in the functional structure of the verb with which they combine (see Nash 1980: 48-49, 200-01, 222 for details). A further distinguishing property is that most (the exception is /jurntal/) dative-adjunct preverbs cannot host a directional enclitic (whereas all other preverbs, except perhaps for some lexical preverbs, may host a directional enclitic).

One dative-adjunct preverb /jurnta/ 'away from DAT, removal from (with adverse effect on) DAT' is exemplified in a sentence quoted in 2.4.1. Another is exemplified in the following sentence, which also shows that a dative argument may be added to a clause by one of these preverbs even if the clause already contains a dative selected by the verb root:

Ngarrka-ngku-rla-jinta karli karnta-ku
man -Erg -Dat-Dat boomerang woman-Dat

kurdu-ku marlaja-punta-rnu
child-Dat Causative-deprive-Past

1. 'The man took the boomerang away from the child, because of the woman'; 2. 'The man took the boomerang away from the woman, because of the child'. (The sentence has at least these two readings, according as to whether the dative-marked nouns are construed with the oblique argument of /punta-rni/ 'ERG take ABS away from DAT', or with the dative argument added by the preverb /marlaja/.)

The dative-adjunct preverbs are:

jirrnganja yirrkirnpa	Comitative, with (dependent) DAT
jurnta	Adversative, away from DAT
kaji [Yuendumu] ngayi [E]	Benefactive, for DAT
marlaja (marlangka -- restricted version)	Causative, made possible by DAT
piki(piki)	in jeopardy of DAT

In the languages to the north-west of Warlpiri with 'particle-auxiliary' constructions, there is no equivalent of the dative-adjunct preverb, i.e. there are no particles which introduce an extra argument into the clause (Merlan, p.c.).

There are two adverbial preverbs mentioned above in section 2.4.1 which also introduce a dative argument but which are not to be classified as true dative-adjunct preverbs. Not only do they host directional enclitics, but also the dative argument introduced by both these adverbial preverbs controls an Objective Complement (in /-kurra/) and not an Obviative Complement (in /-rlarni/) (a further distinction overlooked by Nash 1980:49n7).

2.4.3 DERIVED PREVERBS

Preverbs may be derived productively from Infinitives and Nominals in combination with a couple of verb roots; see Nash 1980:42-45 for an account. The Inchoative root /-jarri-mi/ and Causative root /-ma-ni/ combine productively with Nominals and form a complex verb with a structure quite similar to that of a preverb-verb combination, e.g.:

jukurr-ma-ni	'ERG dream about ABS(?)' (cf. jukurrpa 'dream')
wikiny(pa)-ma-ni	'ERG taper ABS' (cf. wikinypa 'ledge, etc.')
pinpin-ma-ni	'ERG flatten, smoothe ABS' (cf. pinpinpa 'flat, smoothe')[15]

The Inchoative and Causative may be separated by a directional enclitic from the nominal with which they combine. Normally a nominal may not host a directional enclitic, and the fact that it may just in this context supports the analysis of this construction as involving a denominal preverb. An example is the directional clitic /rra/ in

wiri-rra-jarri-nja-ya-ni
big-forth-Inch-Inf-go-NPast

'it goes growing forth'

These Nominal-Verb constructions are comparable to 'noun incorporation', as found to a limited extent for instance in Yidin (Dixon 1977:465-73). Warlpiri also has a few instances of preverbs derived from nouns, other than the productive Inchoative and Causative combinations, and these fit the pattern of 'object incorporation'. Examples are all verbs of bodily function, such as:

/kuntul-pi-nyi/	'ERG cough' (cf. /kuntulpa/ 'cough' (N))
/ngungkurru-pangi-rni/	'ERG snore' (cf. /pangi-rni/ 'ERG scratch, dig ABS')

Note the persistence of the ERG-linking of the subject of these two one-argument verbs — compare the discussion in 2.3.

Infinitives as preverbs are discussed in section 2.3. The productive power of Infinitives and Nominals as derived preverbs is best seen as a property of those particular verb roots which enter such combinations — hence they differ in the type of productivity from the combinations of 2.4.1 and 2.4.2.

2.5 ETYMOLOGY OF PREVERBS

Preverbs are evidently a long-established category in Warlpiri, well integrated into the structure of the language.

The morpheme structure of preverbs conforms fairly closely to that of nouns (and words) in Warlpiri (see Nash 1980:67-81). There are two respects in which a preverb's form is less restricted than that of a nominal root in modern Warlpiri: (i) a preverb, unlike any other Warlpiri morpheme, may end in a consonant — any coronal sonorant non-glide consonant; (ii) a few preverbs consist of a single syllable, either an open syllable with a long vowel, or a closed syllable with a short vowel — both types not possible for nominal roots, but which were probably possible nominal shapes at an earlier historical stage. In general, the morpheme structure of a preverb conforms to the template:

$$CV(V)(C)\ (CV(C))^n,\ n \text{ a non-negative integer}$$

A few preverbs may be derived from nominals which no longer exist independently, through a freezing of a derivational process mentioned in section 2.4.3. Some others are cognate with present-day verb roots, possibly from a common nominal source, as in

parnti-mi	'ABS smell, give off odour'
parnti-nya-nyi	'ERG smell ABS, perceive by smell'

(cf. the Nominal /parntirr-parntirrpa/ 'smell of corpse')

However, it is also possible that preverb /parnti/ derives from a verb root. Compare verb derivation by stem-compounding, reported for Diyari's eastern neighbour Yandruwandha by Austin (p.c.), and attested by one compound Diyari verb (Austin 1981a:69).

A few preverbs may even be derived from something like stylised onomatopoeia. For example, /la(a)rr/ 'humming, whining', the only non-productive preverb recorded with the root /purla-mi/ 'ABS shout to DAT', giving /la(a)rr-purla-mi/ 'ABS hum, whine'; and /yapajaa/, the cry sometimes made by people in pain, is used in the complex verb /yapaja(yi)-ma-ni/ 'ABS groan in pain'.[16]

2.6 EXAMPLES: VERBS IN /YI-NYI/ 'to give'

The root /yi-nyi/ 'to give' enters into numerous preverb combinations of a variety of types. Here I classify all recorded combinations according to the type of preverb and demonstrate the varying degree of semantic compositionality (discussed in 2.3). This presupposes an analysis of the meaning of /yi-nyi/ which has not yet been achieved. I ask the reader's indulgence on this point, and adopt as a working definition the suggestion (due to Mary Laughren) 'X causes control over Y to pass to Z'.

2.6.1 PRODUCTIVE PREVERBS

The following are a sample of the combinations possible of /yi-nyi/ and the productive preverbs. Note that each combination is a hyponym of /yi-nyi/:

kutu-yi-nyi	ERG give DAT anything at all
nganjini-yi-nyi	ERG give ABS to DAT on arrival
yarda-yi-nyi	ERG give DAT some more ABS
pina-yi-nyi	ERG give ABS back to DAT

2.6.2 SEMI-PRODUCTIVE PREVERBS

The first example of a semi-productive preverb in combination with /yi-nyi/ is probably a hyponym, and the second is not. The full sense of /yi-yi/ is not present even though there is a controlled transfer involved.

pirri-yi-nyi	ERG distribute ABS to DAT (/pirri/ generally means 'distributing, scattering')
rduul-yi-nyi	ERG light ABS (fire), ERG fan ABS (fire) (/rduul/ generally means 'rapidly expanding' or the like, as in /rduul-pardi-mi/ 'ABS explode', /rduul/nga-rni/ 'ABS flare up')

2.6.3 LEXICAL PREVERBS

There are several sorts of lexical preverb found in combination with /yi-nyi/.

(a) First, those which form a hyponym of /yi-nyi/ and, it appears, involve a preverb derived, perhaps only in the historical sense, from a nominal:

ngunyungunyu-yi-nyi	ERG give DAT what one has so far (and go for more)

(ngunyungunyu 'one load', ngunyungunyu-ngarrirni 'ERG advise, propose, suggest')

yajarri-yi-nyi	ERG exchange ABS freely (with DAT?)

(yajarri 'gift', yajarri-mi (with recip.) 'ABS exchange gifts')

yirdiyi-yi-nyi	ERG make room for DAT

(yirdiyi 'road, route, way, space')

jantajanta-yi-nyi	ERG pass ABS around to DAT, ERG lend ABS, ERG share ABS

(jantawarra 'distributed, for everyone', jantawarra-ma-ni 'ERG share ABS', jantalypa 'quartered kangaroo')

(b) Second, those formed with a preverb which occurs only with one other root, namely /pi-nyi/ 'ERG act on ABS'. The combination with /pi-nyi/ apparently has the same meaning as the combination with /yi-nyi/. The meaning of the compound is not a hyponym of /yi-nyi/, unless a quite abstract transfer of control from one entity to another is conceived as being involved in the meaning of the combinations.

jakuru-yi-nyi	ERG announce one's own departure (to DAT?), ERG take leave (of DAT?)
jinjin-(y)i-nyi	ERG request favour of (ABS/DAT?)
kintil-(y)i-nyi	ERG close incision in ABS with stick for purpose (/kintilpa/)

There are two other preverbs found only with /yi-nyi/ and /pi-nyi/, but for these there is no connexion of meaning between the combinations with the two different roots:

marri-yi-nyi	ERG brandish ABS, ERG feint with ABS

(marri-pi-nyi '1. ERG covet ABS, 2. ERG bury ABS (deceased relative)')

yaru-yi-nyi (with recip.)	ERG go in a big group

(yaru-pi-nyi 'ERG wipe ABS, ERG spray ABS', yaru '1. covered with water, 2. light in weight')

(c) Similar to (b), preverbs which are generally found only with /yi-nyi/ and /pi-nyi/, or only with /yi-nyi/. These all have the phonological shape

CV(C)CVrr-(y)i-nyi

where the CV(C)CV element is often relatable etymologically to a nominal. The compound verb generally has two arguments (not three). The first argument, linked to ERG case, is typically a human acting in control on another entity represented by the second argument, linked to ABS case. The action generally involves an instrument (optionally expressible in the ERG/INSTR case), the type of which is inherent in the verb's meaning, and which is in some cases etymologically perceptible in the CV(C)CV element.

	palyarr-(y)i-nyi	ERG anoint ABS	[E]
	(palya 'wax, sticky substance'; palyarr-wanti-mi 'ABS fall and shatter')		
	jurdurr-(y)i-nyi	ERG cover ABS	
	(jurdu 'dust, dust cloud', jakarr-pi-nyi 'ERG cover ABS')		
	rdilpirr(y)i-nyi }	ERG make hole in ABS,	
[E]	tilypirr(y)i-nyi	ERG pierce ABS	
	pirlirr-(y)i-nyi }	ERG beat in 1½ time	
	pirlirr-pi-nyi		
	(Warlmanpa: pirlipi 'clap sticks')		
	purlturr(y)i-nyi }	ERG stick spear part way in ABS	
	purlturr-pi-nyi		
	yimirr-(y)i-nyi }	ERG frighten ABS with empty talk or noise	
	yimarr-pi-nyi		
	(yimi 'speech, message')		

Two further preverbs which fit with the ones in this subsection but which occur with a larger number of other verb roots are

rdungkurr-(y)i-nyi	ERG dislodge ABS
rdanjarr-(y)i-nyi	ERG provision ABS

Both have a discernible meaning: /rdungkurr/ 'dislodging' (found with /kiji-rni/ 'throw', /yirra-rni/ 'pull', etc.), and /rdanjarr/ 'a lot of' (found with /ka-nyi/ 'carry', etc.).

One line of speculation about the origin of these /rr/- final preverbs is to relate them to the 1st conjugation roots in /rri-mi/ listed in 3.3(a) and discussed in 3.4, at least in proposing that there was once a denominal verbalising suffix */-rri/ which formed verbs of the 'zero' conjugation (the fore-runner of the present-day 1st and 3rd conjugations — see Hale n.d.). In combination with certain nominals of form CV(C)CV, at least, the */-rri/ suffix form a transitive 'applicative' verb, with the meaning that the instrument represented by the given nominal be used characteristically. Thus, at an earlier stage, a verb root such as

*palya-rri 'to use /palya/'

existed. These underwent reanalysis, given the phonological, morphological and semantic possibility of reinterpreting the form as being derived from /yi-nyi/, and thus created a preverb morpheme such as /palyarr/ which subsequently became available for combination with certain other verb roots. Note that vowel assimilation does not penetrate the preverb in modern Warlpiri — so that /rdilypirr-(y)i-nyi/ has Past tense /rdilypirr-(y)ungu/ not */rdulpurr-(y)ungu/.

Naturally, this proposal calls for further supporting evidence and an account of the relation, which appears problematic, of the postulated */-rri/ to other suffixes reconstructed as */-rri/. It is offered at this stage as a suggestion to explain the otherwise remarkable set of preverbs just listed.

(d) Finally, preverbs which occur only with /yi-nyi/ and which do not form a hyponym of /yi-nyi/, but nevertheless generally form a transitive verb with ERG-linked subject which is typically a human in control of an activity.

juta-yi-nyi	ERG hit ground to determine presence of yams
rdingan-yi-nyi	ERG curse ABS by boning
rdalpu-yi-nyi	ERG carry ABS under arm, as coolamon
julyamarda-yi-nyi	ERG throw ABS (dirt) up (at DAT?)
wakawaka-yi-nyi	ERG use arms and kill ABS
kuru-yi-nyi	ERG warm ABS over fire
kardi-yi-nyi	ERG heat ABS
(also kardu-yi-nyi, cf. kardu-ma-ni 'ERG manufacture ABS')	
rdirri-yi-nyi	ERG start ABS, ERG start to V-INF-Purposive
(also found in /rdirri-yarnka-mi/ 'start on journey')	
jatu-yi-nyi	to go in opposition to DAT (?)
(also found in jatu-pardi-mi 'ABS go looking for fight')	
yurrurl-yi-nyi	ERG dart rapidly to avoid ABS, ERG talk one way and think another
(cf. yurrurlu, wirrirli 'March fly')	

A further, probably related, set of examples is

mirrmirrparlu-yi-nyi mirrmirrmarli-yi-nyi	ERG make ABS shine
mirrmirrmarli-yi-nyi	ERG (cold weather) cause ABS to shiver

2.7 SUMMARY OF PREVERB PROPERTIES

The types of preverbs and their various properties discussed in section 2 are as follows:

	I	II	III	IV
PREVERB TYPE	directional?	Aux?	V-PVB order?	V/PVB separate?
INF-ya-ni	yes	no	no	no
N-jarri-mi	yes	mostly not	no	no
N-ma-ni				
N-V	yes	yes	yes	(yes, irrelevant)
semi-productive	yes	yes	no	no
lexical	no?	no	no	no
adverbial	yes	yes	yes	sometimes
dative-adjunct	no	yes	yes	sometimes

Abbreviations of properties:

•directional?:	Can the preverb host a directional enclitic?
•Aux?:	Is the order PVB-AUX-V possible? (i.e. can an Auxiliary occur between preverb and verb).[17]
•V-PVB order?:	Can the preverb occur immediately following (as well as preceding) the verb it is combined with?
•V/PVC separate?:	Can the preverb be separated from the verb (by words of the sentence, other than by directionals and the Auxiliary)?

3. CLASSIFICATION OF WARLPIRI ROOTS

All the known Warlpiri verb roots are listed in this section. They are arranged according to a gross property of combination with preverbs, viz. the degree to which they occur in lexical preverb combinations (as described in the previous section). Beyond this there are, of course, many finer classifications not considered here, at least within groups 3.1 and 3.2, according to which roots combine with a particular semi-productive preverb — for instance, /pirri/ 'scatter' selects verbs with a certain motional component in their meaning.

The citation form of the root is the non-past inflected form, which suffixes to indicate conjugation membership (except that /nga-rni/ is the sole member of the 4th conjugation and not a member of the 2nd conjugation). The gloss assigned is extremely skimpy, and is designed to give a rough idea of the basic meaning of the root and to present the case-frame(s) it selects.

3.1 ROOTS WITH MANY PREVERB-DERIVED STEMS

>janka-mi	ABS (fire) burn ERG (fire) burn ABS
jarri-mi	ABS become ...
>karri-mi	ABS stand
nguna-mi	ABS recline
>nyina-mi	ABS sit
>pardi-mi	ABS arise
parnka-mi	ABS run
purra-mi	ERG (person) burn ABS
wangka-mi	ABS speak, ABS make characteristic noise ABS speak to DAT
wanti-mi	ABS drop
wapa-mi	ABS move about
-jirri-rni	ERG act forcefully on ABS
kiji-rni	ERG throw ABS ERG put decoration ABS on DAT
luwa-rni	ERG hit ABS with missile
marda-rni	ERG hold ABS
>ngarri-rni	ERG scold ABS ERG tell ABS to DAT ERG signify ABS
paji-rni	ERG cut ABS
paka-rni	ERG strike ABS
panti-rni	ERG pierce ABS
-parri-rni	ERG act on ABS
yirra-rni	ERG place ABS at LOC,ALL ERG create design ABS on DAT
>ka-nyi	ERG transport ABS
>nya-nyi	ERG perceive ABS ERG look about for DAT
>pi-nyi	ERG impact on ABS
>yi-nyi	ERG give ABS to DAT
>nga-rni	ERG ingest ABS

ji-ni	ERG scold ABS
ma-ni	ERG get ABS
-ma-ni	ERG cause ABS become...
>ya-ni	ABS go

> — these roots are often diluted in meaning in combination with a preverb (see section 2.3).

3.2 ROOTS WITH A FEW PREVERB-DERIVED STEMS

jiti-mi	ABS descend
kampa-mi	ABS (fire) burn ERG (fire) burn ABS
karrka-mi	ABS proceed
kulpa-mi	ABS return home
-para-mi	ERG follow ABS
pura-mi	ERG follow ABS
purla-mi	ABS shout to DAT
-yalpi-mi	return (from hunting) and...
yarnka-mi	ABS start on journey ABS grab for DAT
yula-mi	ABS cry
kati-rni	ERG weigh down on ABS
pangi-rni	ERG scratch ABS
parda-rni	ABS wait for DAT
-pirri-rni	ERG act on ABS...
punta-rni	ERG take ABS away from DAT
yingki-rni	ERG set fire to ABS
yurrpa-rni	ERG grind ABS
-nga-rni	ABS move
-ma-ni	ABS make noise

3.3 ROOTS WITH NO DERIVED STEMS (COMBINE ONLY WITH PRODUCTIVE PREVERBS)

Some roots combine with one preverb which may not have 'productive' status: such preverbs are given in square brackets after the root concerned.

(a) Frozen Derived Forms (see 2.6.3(c), 3.4)

Polysyllable+rri-mi

kawarirri-mi	ABS wander
ngarlarri-mi	ABS laugh
ngurntirri-mi	ABS scold DAT
parntarri-mi	ABS crouch [maarr- 'crouch flat']
wapirri-mi	ABS conceal DAT
yajarri-mi (+recip)	ABS exchange gifts
yurirri-mi	ABS stir

(b) Frozen Preverb-Verb Combinations (see 3.4)

CVC+pi (cf. root /pi-nyi/ in 3.1 above)

karlpi-mi	ERG (temperature) cause suffer ABS
tirlpi-mi	ERG flake ABS
jampi-rni	ERG lick ABS
marnpi-rni	ERG touch ABS
parnpi-rni	ERG touch ABS
wirrpi-rni	ERG eat ABS [avoidance] [yilyi- 'slurp']
yarrpi-rni	ERG build fire ABS
yirrpi-rni	ERG insert ABS

CVC+ji- (cf. root /-ji-ni/, 3.1 above)

larrji-rni	ERG scratch ABS
nyunji-rni	ERG kiss ABS
parlji-rni	ERG wash ABS
rdirrji-rni	ABS start a fight
walji-rni	ERG pluck ABS
winji-rni	ERG pour ABS

Others

waraparnpi-mi	ABS sing out ABS announce DAT
wuurlparra-rni	ERG dehair ABS
tirlarri-rni	ERG split ABS

(c) Derived Roots

The following two roots also occur as preverbs and have etymologically related nominals:

pali-mi	ABS die [jipirr-jipirr- 'flicker']
parnti-mi	ABS smell

The following two roots are the only ones in the third conjugation which consist of more than one syllable. The element */ra-/ indicates an additional ancient root of that conjugation (Hale n.d.). The eastern Warlpiri /mapara-nyi/ corresponds in meaning to /mapa-rni/ in other dialects, and is probably related to nominal stems of the form /maparnpa/ 'healing powers', etc. found in various Australian languages.

mapara-nyi	ERG anoint ABS [E]
yurlpara-nyi	ERG send ABS [E]

(d) Possible Recent Loans From Arandic

-yalpi-mi	(see section 3.2)
yampi-mi	ERG leave alone ABS ERG reject ABS
yarlki-rni	ERG bite ABS
yilya-mi	ERG send ABS to DAT

(e) Other Roots With No Lexical Preverb Combinations

japirdi-mi	ABS threaten DAT
jarnti-mi	ABS limp
jija-mi	ABS succumb to DAT
jirrti-mi	ABS hang out
kapati-mi	ABS be uneasy in DAT
karli-mi	ABS flow [jirrmily(pa) 'tear']
lirri-mi	ABS swell
nyurla-mi	ERG knead ABS
papi-mi	ABS ignite
rdipi-mi	ABS gather
rdipi-mi	ABS encounter DAT
turlka-mi	ERG pinch ABS
wipi-mi	ABS radiate
wirli-mi	ERG poke ABS

wirnpirli-mi	ABS whistle
wirnti-mi	ABS (women) dance
yirdi-mi	ABS be frightened
yuka-mi	ABS enter
yulka-mi	ABS cherish DAT
jaja-rni	ERG eat off ABS
japi-rni	ERG ask ABS about DAT
jarnti-rni	ERG scrape ABS
jija-rni	ERG notice, spy ABS
jiti-rni	ERG tease ABS
kardi-rni	ERG fetch, get ABS (water)
kipi-rni	ERG winnow ABS
kulpa-rni	use
maja-rni	ERG straighten ABS
mapa-rni	ERG anoint ABS
mati-rni	ABS go in procession
mila-rni	ERG select (best one of) ABS
mirri-rni	ERG erase ABS
ngaja-rni	ERG void ABS
nganti-rni	ERG erect ABS
ngarlki-rni	ERG block ABS
ngarrmi-rni	ERG ritually increase ABS
paja-rni	ERG taste ABS
parnta-rni	ERG withdraw-from-fire ABS
payi-rni	ERG ask ABS about DAT
pirrki-rni	ERG trim ABS
rdanpa-rni	ABS accompany DAT
wanja-rni	ERG take ABS (sip) off DAT
wardi-rni	ERG straighten ABS
wari-rni	ERG tie ABS
warri-rni	ERG seek DAT
warrka-rni	ABS climb up, ERG ride ABS
yaja-rni	ERG enlist ABS

yarli-rni	ERG soak ABS
yipi-rni	ERG pick out pimple ABS
yingki-rni	ERG set fire to ABS
yirnti-rni	ERG capsize ABS
yunpa-rni	ERG sing song ABS
yunta-rni	to push, shove, jostle (as cattle)

There are a number of verb stems in Warlpiri which are synchronically analysable as preverb-verb combinations but which show some phonological amalgamation, typically cluster simplification at the preverb-root boundary (see Nash 1980:79), and possibly extra stress reduction on the root. Examples include a subclass of verbs with root /yi-nyi/, namely those with /rr/-final lexical preverbs, listed in 2.6.3(c), such as /rdilypirr-(y)i-nyi/ 'ERG wound ABS'. Note, for instance, that the Past inflexion of /rdilypirr-nyi/ is /rdilypirrungu/, not */rdulpurrungu/ — the combination has not undergone the reanalysis discussed in 3.4. Other similar combinations are those with glide-initial roots /wapa-mi/, /ya-ni/, /wanti-mi/.[18]

3.4 ETYMOLOGICALLY COMPLEX ROOTS

Within group 3.3 there are verb roots which are apparently etymologically complex but in modern Warlpiri are unanalysable roots. (Compare the analysable roots mentioned at the end of section 3.3.)

In particular, in 14 of these roots (but in none of those of groups 3.1 and 3.2) it is possible to identify two monosyllabic root-final formatives (*-pi and *-ji) which are probably related to the modern transitive roots /pi-nyi/ and /ji-ni/.[19] Supporting evidence includes:

(i) the case-frames of the relevant modern roots are ERG-ABS, even the two which are in the predominantly intransitive conjugation (viz. /karlpi-mi/ and tirlpi-mi/), with 1 exception out of 14 (/rdirrji-rni/);
(ii) the non-final part of the root has phonological shape CVC, where the second C is [+son, +cor, +cons] (except in /jampi-rni/ 'ERG lick ABS' — possibly involving epenthesis or assimilation, and note common Australian /jawa/ 'mouth'), i.e. a possible word-final consonant at an earlier stage of the language (before /-pa/ augmentation — see Hale 1973b); and the only /rrj/ and /rlp/ clusters in Warlpiri verb roots are confined to these 14 roots.

Notice that the roots just discussed are the historical product of reanalysis. The reanalysis brings about a congruity between morphological and semantic structure: the erstwhile 'theme' (a semantic unit which corresponded to no morphological constituent) is reanalysed as a simple root (which is both a meaning unit and a morphological unit).

```
        *[tirl][pi-TENSE]          [tirlpi-TENSE]

                 --stem--   --->    ---stem-----

         ---theme--
```

A third formative evident in group 3.3(a) in */-rri/, which is probably related to the derivational affix of the same form in the southern Pilbara languages, Western Australia (where it has the function of a Passive marker — Austin 1981b), and the wider range of possible cognates gathered by Sutton (1976:303-4), including forms in /-rri-/ which mark Inchoative and Middle (Refl/Recip). Evidence includes:

(i) the 7 roots are all intransitive, i.e. have a subject in the Absolutive (unmarked) case;

(ii) the non-final part of the root has phonological shape CV(C)CV, the most common word shape;

(iii) the only textually attested verbal reduplications (Nash 1980: 136-47) which copy part (not all) of a verb root are those which copy the first two syllables of /ngarlarri-mi/, /parntarri-mi/, giving /ngarla-ngarlarri-mi/, /parnta-parntarri-mi/ respectively (though /wirnpi-wirnpirli-mi/ may also be well-formed);

(iv) the only verb roots which contain two different high vowels (i.e. both /u/ and /i/) are /ngurntirri-mi/, /yurirri-mi/ (~/yururri-mi/) and /nyunji-rni/), all three of which are proposed to be etymologically complex. (The root /winji-rni/ has been recorded in Past inflexion as /winjurnu/ as well as the usual /wunjurnu/. However, /winjurnu/ violates the Warlpiri stem prohibition '*/iCu/ unles C is /p,w/' whereas /nyunjirni/, etc. run counter to a generalisation which holds only verb roots.)

At what may well be a greater etymological depth, it is possible to perceive one more verbal formative in Warlpiri — the /*na-/ of stance verbs isolated by Merlan (to appear). There are only two verb roots in Warlpiri that have this final syllable: /nyina-mi/ 'ABS sit, be' and /nguna-mi/ 'ABS recline'. Further, these two roots are the only roots of the /-mi/ conjugation ('1st', in Warlpiri literature, preperly the 'zero' conjugation) which take an Imperative and Irrealis other than in /-ya/ — these two roots prefer the Imperative in /-ka/ (and Irrealis /-karla/), the ending of the '2nd' conjugation, and of inceptives formed from 3rd conjugation roots (Nash 1980:41).

4. COMPARISON OF VERB-ROOT INVENTORIES

The Appendix contains Tables 1 - 4 presenting all the known verb roots of four Pama-Nyungan languages of the so-called Western Desert type in the west-central Northern Territory and adjacent Western Australia: another member of the Ngarrka subgroup Warlmanpa, and three languages of the Ngumbin subgroup Jaru, Gurindji, and Walmatjari.

The roots in the Tables in the Appendix should be compared with each other and with the list of Warlpiri roots in 3.1. The reader will see that the majority of the roots have cognates, and the majority of those that do not nevertheless have a corresponding root with fairly similar meaning.[20]

There are 13 verb roots found in all five languages, and there are a further 5 roots found in four of the five languages, shown in Table 5.

TABLE 5 — COMMON VERB ROOTS

gloss	Walmatjari	Jaru	Gurindji	Warlmanpa	Warlpiri
burn	kampa-	kampa-rn	kampa	kupa-ka	kampa-mi
(hit	luwa-	luwa-rn	luwa-	la-ka	luwa-rni
(spear	la-nta	la-n	_______	_______	_______
bite	paja-rra	paya-n	paya-	piya-ka	paji-rni
sit,stand	karri-	karri-rn	karr-y	ka-rra	karri-mi
fall	wanti-	wanti-ny	wan-y	wa-nta	wanti-mi
say	ma-nyja	ma-ny	ma-ny	-ma-nta	-ma-nta
eat	nga-nyja	nga-ny	nga-ny	nga-nyja	nga-nja
give	yu-ngka	yu-ng	jayi-ng	yu-ngka	yi-nyi
carry	ka-ngka	ka-ng	ka-ng	ka-ngka	ka-ngka
see	nya-ngka	nya-ng	nya-ng	nya-ngka	nya-ngka
hit	pu-ngka	pu-ng	pu-ng	pu-ngka	pi-nyi
get	-ma-nta	ma-n	ma-n	ma-nta	ma-ni
go	ya-nta	ya-nta	ya-n	-ya-nta	ya-ni
scold	_______	ju-n	ju-n	jin-ka	ji-ni
put	_______	yaa-n	yuwa-rr	ya-ka	yirra-rni
void	ngaja-rra	_______	ngaya-rr	ngaya-ka	ngaja-rni
sing	yinpa-	yunpa-rn	yinpa-	_______	yunpa-rni
leave	wanyja-rra	warnta-n	wanyja-rr	winyja-ka	_______

There are also 4 roots found in 3 of the 5 languages:

gloss	Walmatjari	Jaru	Gurindji	Warlmanpa	Warlpiri

cut	________	kuma-rn	kuma-	kuma-ka	________
cry	lu-ngka	lu-ng	________	lu-ngka	________
scratch	________	pangi-n	________	pangi-ka	pangi-rni
wet	________	kurnta-n	kunyja-	kinyja-ka	________

The roots in Table 5 account for the following fraction of all verb roots in each language:

Walmatjari	Jaru	Gurindji	Warlmanpa	Warlpiri
16	17	18	17	17
42%	44%	60%	43%	16%
				(55% of 3.1)

Notes:

1. There is sometimes a variation in meaning from language to language, as is evident in the slightly fuller glosses given in the Appendix.
2. Warlpiri has /paja-rni/ 'taste' and /paji-rni/ 'cut, bite', and it is probably the former which is cognate with the root 'bite' in the other languages.
3. Warlmanpa /jin-ka/ means 'burn', not 'scold', but I have listed it with roots of similar form above.
4. Certain differences between the languages are the result of variations in citation form: for instance /pu-ngka/ is the Imperative of Warlpiri /pi-nyi/ (the NonPast citation form); /ji-ni/ has Past /ju-nu/, etc.
5. A further member of the Ngumbin subgroup, Mudbura, also appears to have verb roots corresponding to those in Table 5. Since the sources of information on this language are much less extensive, I have not included it in the table.

If the exercise is repeated with the Warumungu roots given by Simpson (1980) or the Pintupi/Luritja roots given by Hansen & Hansen (1977), the number of apparent cognate roots is smaller (even though these two languages are also of Western-Desert type, and have fifty or more verb roots). Specifically, of the 18 most common roots listed above, 7 are found in Pintupi (kampa-, ma- 'get', nya-, patja-, pu-, ya-, yu-) and only about 4 in Warumungu (nya- 'see'; pu- 'bite, dance'; -ma- [unproductive trans. suffix]; yungku- 'burn [intr.]').[21] However, the meanings of the common roots, if not their form, usually correspond to roots (rather than compounds) in Warumungu.

It is evident that Warlpiri's verbal inventory differs much less from that of the related Western-Desert type languages than appears from a simple count, at least with respect to those of its own subgroup (Ngarrka), and the one to the north and north-west (Ngumpin). When one makes the comparison instead with the covert class of Warlpiri verb roots which are presumably of more ancient vintage in the language, viz. the 'core roots' of 3.1 above, which have entered into a number of lexical preverb-verb combinations, then the similarity between Warlpiri and its neighbours increases. Conversely, we see that there is an historical explanation for the diversity of combinatory frequencies of different Warlpiri verb roots.

It is also interesting to compare the meanings of the recurring roots with those of the 24 compounding Hindi roots, listed at the end of section 1: about half correspond.

5. CONCLUSION

My proposal for history of certain frozen Warlpiri combinations in sections 3.3(a) and especially 3.3(b) is the Warlpiri parallel to Merlan's (1980b, to appear) proposal for certain Pama-Nyungan languages, particularly Yidin and Dyirbal. She has shown that a number of disyllabic verb roots have second syllable putatively cognate with an ancient monosyllabic verb root. Donaldson (1976:767) had suggested a parallel history for certain verbalisers in Ngiyambaa, and Dixon (1980:418-9, but see 256) suggested for Pama-Nyungan verbs that 'perhaps the majority of modern polysyllables' are fused compound structures. Thus the Warlpiri situation bears out Merlan's observation that an **archaic complex** verb structure comparable to those productive today in many non-Pama-Nyungan languages is discernible in the history of many Pama-Nyungan languages.

The reanalysis evident in the history of these etymologically complex verbs is of the type that minimises disparity between morphological structure and semantic units. The change is in the direction of restoring compositional semantics of complex words. It appears that such a disparity, as in the structure

```
[preverb  [root-inflexion] ]
 ----theme-----
```

is not uncommon (Williams 1981), but that in instances where the 'theme' requires its own lexical entry, with properties separate from those of the root and preverb, it is not uncommon for reanalysis to give rise to the structure

```
[[preverb-root] inflexion]
```

and for there to thus arise a new root.

APPENDIX — VERB ROOTS IN NEIGHBOURING LANGUAGES

The verb roots of four Pamam-Nyungan languages to the north and west of Warlpiri are given in this appendix.

As for the Warlpiri roots in section 3, the glosses given to the verb roots in these languages are extremely skeletal, and serve no more than as a hint at the meanings of the root.

Where known, a case-frame is provided, using the abbreviations

ERG - Ergative   ABS - Absolutive   DAT - Dative
LOC - Locative ('Accessory' in Walmatjari)

Some roots (including all those which have case-frames both with and without an ERG) are given more than one gloss, and thus the root appears more than once (once for each gloss).

The conjugation membership of each root is indicated in the given suffix.

Table 1 gives the roots of Gurindji (Kuurrinyji) with an English gloss on the same line. For Gurindji, the suffix is a particular consonant (or zero) which is an abstract conjugation marker. The roots are basically as provided by Patrick McConvell (p.c., and to appear) and Norman McNair (p.c.), and I have added case-frame information and slightly amended some glosses in the light of data from Hale's Gurindji Notes (1959).[22]

Note the generalised use of /luwa-/ in the 'avoidance language' of Gurindji (McConvell to appear:19). Used in the avoidance vocabulary, /luwa-/ thus has any case-frame and, as Tsunoda (1978:219) observes for Jaru, where /luwarn-/ is also the general avoidance verb, 'this verb can be combined with any preverb'.

Table 2 gives 36 of the 39 Walmatjari verb roots recorded by Joyce Hudson. It is based on her list (1978:43) and I have added the case-frame markers to the glosses from information in her discussion of transitivity. The Imperative (Hudson's Irrealis) form of the verb is given to show conjugation membership.

The Jaru roots listed by Tsunoda (1978:85) are in listed Table 3. I have recast the forms into the Warlpiri orthography. Tsunoda (1978:3) refers to two dialects: 'N' Nyininy (to the east, neighbouring Malngin) and 'W' Wawarl (to the west, neighbouring Walmatjari).

TABLE 1 — GURINDJI VERB ROOTS

ja-n	ERG copulate with ABS [W?]
jama-rr	ERG grind ABS (seeds) with stone
jayi-ng	ERG give ABS to DAT
jiya-	ABS burn
jiya-	ERG deprive of ABS
ju-n	ERG scold ABS
ka-ng	ERG take ABS
kampa-	ERG cook ABS
karr-y	ABS sit, be
karrwa-	ERG have, keep ABS
kaya-rr	ERG kick ABS
kuma-	ERG cut ABS [Malngin]
kunyja-	ERG spray ABS
luwa-	ERG hit ABS with missile [Malngin] general avoidance verb
ma-n	ERG get ABS
ma-ny	ABS say
minyja-	ERG wet ABS
nga-ny	ERG eat ABS
ngaya-rr	ERG void ABS
nya-ng	ERG see ABS
pa-rr	ERG hit ABS
papa-rr	ERG weigh down ABS
paya-	ERG bite ABS
pu-ng	ERG act on ABS [wu-ng W?]
tuma-	ABS grow
wan-y	ABS fall
wanyja-rr	ERG leave ABS
wuya-	ERG throw ABS [?W only]
ya-n	ABS go
yunpa-	ERG sing ABS
yuwa-rr	ERG put ABS

TABLE 2 — WALMATJARI VERB ROOTS

-jarri-	ABS become ...
-ka-rra	ERG [place] ABS
-kuji-	ERG cause ABS to ...
-ma-nta	ERG [..do..] ABS
jula-	ERG tell, call ABS
kampa-	ERG cook ABS
ka-ngka	ERG carry ABS
kanyji-	ERG stamp, tread on, dance ABS
karla-	ERG dig, scrape ABS
karri-	ABS stand
karrpi-	ERG tie, bind ABS
kirra-nyja	ABS sit
la-nta	ERG pierce, spear ABS
lu-ngka	ABS cry, ERG cry for DAT
luwa-	ERG hit ABS with missile
ma-nyja	ABS speak, say; ERG speak to DAT
manyji-	ABS burn; ERG burn ABS
mapa-	ERG spread on, rub ABS
marra-	ERG scold ABS, talk angrily, argue
nga-nyja	ERG eat ABS
ngaja-rra	ERG give birth to ABS
nguna-	ABS exist, be
nya-(ng)ka	ERG see ABS
paja-rra	ERG chop, bite ABS
papaja-rra	ABS call out
pu-ngka	ERG hit ABS with implement, hand
ruka-nyja	ERG forget LOC
tarra-ngka	ERG throw ABS
turta-ngka	ABS get up (also turta-pu-ngka)
waa-ngka	ERG follow ABS

wanti-	ABS fall
wanyja-rra	ERG leave behind ABS
warnta-	ERG get ABS
ya-nta	ABS go
yinpa-	ERG sing, curse ABS
yu-ngka	ERG give ABS to ABS
yuka-nyja	ABS lie down

[and two others in the 'zero' class]

TABLE 3 — JARU

jampun	ERG kiss ABS
jan	ERG copulate with ABS
jun	ERG scold ABS
kamparn	ERG burn ABS
kang	ERG carry ABS
karriny	ABS sit (N only)
karrun	ERG hold ABS
kayan, kayin (N)	ERG kick ABS
kumarn	ERG cut ABS
kunyjan	ERG wet ABS
lan	ERG spear ABS
lung	ABS cry
luwarn	ERG shoot ABS; general avoidance
man	ERG get ABS
marn	ABS do, talk
marran	ERG tell ABS to LOC
ngarn	ERG eat ABS
nyanan	ERG miss ABS (target)
nyang	ERG see ABS, ERG search for DAT
nyin, nyinang	ABS sit

pangin, pangan (W)	ERG scratch ABS
parntiny	ABS smell (N only)
payan, payin (N)	ERG bite ABS
pulang	ABS call out to DAT (N only)
pung	ABS burn
pung	ERG hit ABS
wajparn	ERG throw ABS
wantiny	ABS fall
wanyjan	ERG leave ABS (N only)
wawang	ERG wipe ABS
wawarn	ERG search for ABS (N only)
wayan, wayin (N)	ABS become
wayirn	ERG tie up ABS (person)
wurarn	ERG stop ABS (a fight)
yaan, jayin (N)	ABS be
yaan, yayin (N)	ERG put ABS
yan	ABS go, come
yingkarn	ERG smooth ABS
yung	ERG give ABS to ABS/DAT
yunparn	ERG sing ABS (song)
yuwarn	ERG send ABS

TABLE 4 — WARLMANPA

These are taken from the list of 44 Warlmanpa verb roots in the appendix to Nash (1979).

-ja-rra	ABS become
-jiya-ka	ERG burn ABS
-ma-nta	ABS make noise
-ya-nta	ABS go
jama-ka	ERG grind ABS
jin-ka	ABS burn, ERG burn ABS

jutpu-ngka	ABS run
ka-ngka	ERG carry ABS
ka-rra	ABS sit, be
kapu-ngka	ERG chase, follow ABS
karla-ka	ERG spear, poke ABS
kinyja-ka	ERG wet ABS
kipa-ka	ERG twist together ABS
kiya-ka	ERG throw ABS
kuma-ka	ERG cut ABS
kupa-ka	ERG (fire) burn ABS
la-ka	ERG hit ABS with missile
lamarta-ka	ERG hold ABS
lu-ngka	ABS cry
ma-nta	ERG get ABS
marta-ka	ERG have, hold ABS
murla-ka	ERG copulate with ABS
nama-ka	ERG crush, weigh on ABS
nga-ka	ERG tell, scold ABS
nga-nyja	ERG ingest ABS
ngarta-ka	ERG trim ABS
ngaya-ka	ERG void ABS
nguka-ka	ERG drink ABS
nya-ngka	ERG see ABS
paka-ka	ERG strike ABS
palu-ngka	ABS die
pan-ka	ABS go
pangi-ka	ERG scratch, dig ABS
partu-ngka	ABS rise
piya-ka	ERG cut, bite ABS
pu-ngka	ERG hit, act on ABS
wa-nta	ABS fall
waka-ka	ABS climb

wang-ka	ABS speak
wayi-ka	ERG seek DAT
winyja-ka	ERG leave behind ABS
ya-ka	ERG put ABS at ALL
yila-ka	ABS drip, leak; ERG melt ABS
yu-ngka	ERG give ABS to DAT

FOOTNOTES

1. I first visited Lajamanu (Hooker Creek) in November 1977, soon after Lothar Jagst's untimely death. Though I had never met him, I was made welcome by his widow, and later became aware of the high esteem in which he is held in that community. It is thus an honour to be associated with his memory in this volume. Funding for this research has been provided by National Science Foundation grant number BNS-7913950 (Kenneth Hale, Principal Investigator).

   The part of this paper focussing on preverbs in Warlpiri is an extension of section 2.6 of Nash (1980:42-55), and was presented to meetings of the Central Australian Linguistic Circle (at Alice Springs, 23 August 1980) and the Australian Linguistic Society (at Monash University, Melbourne, 26 August 1980). A revised version was presented at the Seminar on Australian Aboriginal Languages at M.I.T., 9 January 1981. I am grateful to participants in these meetings for their help, and particularly to Ken Hale and Mary Laughren.

   Warlpiri data is almost entirely from Ken Hale's field notes and the files of the Warlpiri dictionary project. I am indebted to the many workers who have contributed to this project (in particular the supervisors Pam Harris, then Mary Laughren), for on their shoulders the classification presented here is built. Transcription is in the practical orthography, except that hyphens are used more flexibly. I also use on occasion a '2' to indicate that the preceding morpheme is reduplicated. Glosses for pronominal clitics used a numerical code to indicate person and number, following Hale (1973a), and an added s 'subject', o 'object'. The abbreviations ERG (Ergative), and ABS (Absolutive), DAT (Dative) are used for the syntactic cases of Warlpiri and the other languages under consideration: more precisely, for the abstract cases linked to argument positions of lexical items by the particular language's Linking Rules (see Nash 1980, Chapter 6 and the references there). The notation [E] indicates that the form or usage is confined to the Willowra (Lander River) and Hanson River Dialects, i.e. the east of the area where Warlpiri is spoken.

2. Applied to Warlpiri, 'auxiliary' refers to the complex containing a tense/aspect base (possibly zero) and pronominal clitics cross-referencing subject and object, as described in detail in Hale (1973a).

3. The Yirr'-Yorront language of south-west Cape York Peninsula, i.e. not far from Dyirbal in continental terms, has numerous

compound verbs, and these show structural properties quite similar to those of Warlpiri preverb-verb combinations — see Alpher 1973:391-401.

Similarly Gumbaynggir, Gabi, and the West Torres Strait language, which have 'a set of productive prefixes, yielding a considerable number of compound verbs' (Dixon 1972:17).

4. Languages to the west of Warlpiri include a number of Western Australian languages with hundreds of verb roots. Jingili, a neighbour-but-one to the north-east of Warlpiri, also has hundreds of verb roots. Pintupi (a south-western neighbour of Warlpiri) has well over a hundred roots and inspection of the Pintupi dictionary shows many complex verbs similar to Warlpiri.

5. Summarised from the detailed discussion in Birk 1976:47-74. Note too Birk's observation that 'the semantic function of the auxiliary is relatively slight in relation to its other functions' (p. 74).

6. I am grateful to J. Schindler for this information.

7. A further verb with preverb /pirri/ is /pirri-ma-ni/ 'ABS alight, set down'. If this involved the sense of /pirri/ being discussed, the root would need also to have the case-frame ABS, thereby ruling out /ma-ni/ 'ERG get ABS' and 'ERG cause ABS...' and leaving only /-ma-ni/ 'ABS make noise'. However, it is more likely a lexicalised combination: the Willowra dialect synonym is /tarda-ya-ni/, involving /ya-ni/ 'ABS move, go', and the /pirri/ in this particular stem has to be seen as merely homophonous with the distinct /pirri/ referred to in the text. Thus this verb occurs in combination with an adverbial preverb (see 2.4.1) in the textual example

    Kala-lu yaarl-yaarl-pirri-ma-nu yalumpu-ju.
    Aux-they on top- 2 -alight-Past that-Part

    'They set down over the top of those (men).'

(Big Willy Japanangka, text, page 7; transcribed by Mary Laughren.)

8. The distinction drawn here may need modification. That is, there could be certain preverbs which can occur with one or two preverb-verb combinations but, for no apparent semantic reason, fail to combine with other verbs. In other words, it may be possible to have a lexicalised preverb-preverb-verb combination, although the few candidates that have come to my attention have proved analysable in other ways.

9. Note the /-pa/ augment (for a small number of morphemes, the augment is instead /-ku/) which must be present when the morpheme is an independent word (including when it hosts enclitics).

10. Nash (1980:50) incorrectly stated that the synonymous /wurru-ka-nyi/ and /yura-ka-nyi/ were the only occurrences of /wurru/ and /yura/. A second verb involving /wurru/ is given above; and /yura/ is also found in /yura-yura-ya-ni/ 'ABS go along out of sight'.

11. I owe this term to Merlan (to appear).

12. I am indebted to Mary Laughren for this observation and the detailed semantic analysis of /nga-rni/ verbs.

13. The other instances of differences between case-frames of root and compound result from the general addition of an argument to a case-frame (as with dative-adjunct preverbs), or merging of semantic representations (as with the infinitive preverbs discussed below).

14. Nash (1980:47-48) includes 'semi-productive' and 'adverbial' preverbs under the general label of 'adverbial' preverbs.

15. It should be noted that those Nominals which require the augment /-pa/ also require it when combined with /-jarri-mi/: it can only be dropped in combination with /-ma-ni/. Thus /*pinpin-jarri-mi/ is apparently ill-formed, and only /pinpinpa-jarri-mi/ is well-formed. The explanation for this presumably has to do with their basically nominal status, as non-derived preverbs drop /-pa/ freely.

16. Heath (1976:736-7) observes for Ritharngu that some 'roots' (sc. preverbs) may be used as a contraction for the full verb. 'The root form is usually pronounced emphatically, like an interjection, and is definitely expressive'. Alpher (1969) had noted similar particles in Yirr'-Yorront, calling them 'ideophones', and later 'interjections' (Alpher 1973:58).

17. The Auxiliaries observed to occur in the intervening position all have zero 'complementiser' and monosyllabic or zero 'base' — i.e. they begin with /ka-/ 'Present', /-lpa-/ 'Imperfect', or consist only of person-number clitics. See Nash 1980: chaps. 2,7.

18. A more solidified, reanalysed combination is that of an Infinitive with what was the verb root /*yan-/ 'to go', which is undoubtedly

the historical source of modern Inceptive and Progessive derivational affixes — see Nash 1980:41. This is different from the combination of /ya-ni/ with an Infinitive preverb discussed in 3.4.

19. As far as I know, Ken Hale was the first to make this suggestion; he drew my attention to it with the example /tirlpi-mi/.

20. The covert classification of Warlpiri verb roots as presented in section 3 strictly should also be applied to the languages with which I am comparing Warlpiri. To do so requires a considerable wordlist of preverb-combinations of various types, and this is not available to me for the neighbouring languages. It is possible to report at this stage that half the verb roots of Warlmanpa have not been recorded in non-productive preverb-verb combinations, including those which for other reasons one might suspect are a comparatively recent development in the language; and there is a similar covert classification of the Walmatjari roots (for instance, /yinpa-/ and /marra-/ do not occur in preverb-verb compounds — Hudson 1980:2). Thus the cline of verbal inventory size is repeated, though less steeply, for the covert 'core root' inventory.

21. This observation may hold implications for genetic subgrouping; the current classification has three co-ordinate Western Desert Type subgroups for these languages: Wati (Pintupi, etc.), Ngarrka (Warlpiri, Warlmanpa), and Ngumpin. The evidence of these verb roots links Ngarrka more closely with Ngumpin than with Wati.

22. Norman NcNair kindly provided me with a list of the 26-7 (eastern) Gurindji verb roots that he has recorded at Wave Hill (Kalkaringi and Dagaragu), and all but one occur in the eastern Gurindji list provided by McConvell. McNair identifies some of the roots provided by McConvell as being from the westernmost Gurindji dialect (Malgnin). I have indicated dialectal information in square brackets.

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CUP	Cambridge University Press
MIT	Massachusetts Institute of Technology, Cambridge, Mass.

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SOME ESSENTIAL FEATURES OF WARLPIRI VERBAL CLAUSES[1]

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0. INTRODUCTORY REMARKS

The primary division among Warlpiri predicators corresponds to the major two-way division in the Warlpiri parts of speech system, i.e. verbs and nominals. Thus Warlpiri has main clauses which can appropriately be designated 'verbal' — in which the predicator is a verb (V) — and it has main clauses which might analogously be designated 'nominal' — in which the predicator belongs to the nominal (N) part of speech. The first type is illustrated by such sentences as

(1) (a) Kurdu ka yula-mi.
child PRES cry-NPST
'The child is crying.'

(b) Ngaju ka-rna parnka-mi.
I PRES-1 run-NPST
'I am running.'

(c) Ngarrka-ngku ka karli jarnti-rni.
man-ERG PRES boomerang trim-NPST
'The man is trimming the boomerang.'

(d) Kurdu wanti-ja.
child fall-PST
'The child fell.'

(e) Ngaju-rna wanti-ja.
I-1 fall-PST
'I fell.'

(f) Ngarrka-ngku karli jarntu-rnu.
man-ERG boomerang trim-PST
'The man trimmed the boomerang.'

(g) Ngajulu-rlu-rna marlu pantu-rnu.
I-ERG-1 kangaroo spear-PST
'I speared the kangaroo.'

And the second type is illustrated by such sentences as the following:

(2) (a) Kurdu mata.
child tired
'The child is tired.'

(b) Ngaju-rna mata.
I-1 tired
'I am tired.'

(c) Nyuntu-npa wati.
you-2 man
'You are a (fully initiated) man.'

(d) Ngaju-rna ngapa-ku ngampurrpa.
I-1 water-DAT desirous
'I want water.'

(e) Nyuntu-npa jaru-ku ngurrpa.
you-2 language-DAT ignorant
'You do not know (the) language.'

This general, and quite clear-cut, two-way classification of predicate types corresponds not only to the major division in parts of speech, but also to a semantic distinction between active and stative predicators.

All verbal predicators, so far as I am aware, are active in Warlpiri — they all appear with the full range of modality categories (tense-mood-aspect) associated with the Warlpiri verb and auxiliary system. In main clauses, verbs are inflected for tense and mood and they co-occur with the entire range of auxiliary bases (cf. Hale 1976) which flesh out the full tense-mood-aspect system. Verbs are also classified into five conjugations (two populous polysyllabic conjugations and three very sparsely populated monosyllabic ones). Although the range of meaning covered by Warlpiri verbs subsumes categories classified as stative in other languages — e.g. the perception verbs — these cannot be classified as stative in Warlpiri, since no known test for stativity will succeed in separating them from other Warlpiri verbs in any way corresponding to the well-known active-stative distinction of other languages.

By contrast, the nominal predicators bear all of the ear-marks of stativity. They do not combine with the modality categories at all. While it is possible to say that they co-occur with an auxiliary, it is formally the most impoverished — consisting of the zero (i.e. phonologically null) base — and its existence can be detected only by virtue of the overt person markers which attach to it in the same manner as in verbal sentences. These person markers are visible in (2b-e) above, /-rna/ '1 (first singular subject)', and /-npa/'2 (second singular subject)'. The first of these is also seen in the verbal sentence (1b) above, where it is attached to the phonologically overt auxiliary base /ka-/ 'PRES (present)', and in (1e,g) where it is combined with the zero base and is phonologically enclitic to the first non-auxiliary word of the sentence. (Cf. Hale 1973, Nash 1980 for some discussion of the position of auxiliaries in the surface forms of Warlpiri sentences.) The possible presence of an auxiliary in (2a) can only be assumed by analogy with (2b), since the subject noun phrase, being third person singular, contributes no overt person marker to the auxiliary. This is a general fact concerning the third singular and can be seen in the verbal sentences (1a,c,d,f) as well. It should also be pointed out in this regard that the auxiliary is optional in non-verbal sentences, while it is obligatory (albeit sometimes not overt) in verbal sentences. Thus, beside (2b-c), the following are also possible:

(2') (b) Ngaju mata
I tired
'I am tired.'

(c) Nyuntu wati.[2]
you man
'You are a man.'

But the auxiliary cannot be similarly omitted from (1b,e), for example. Hence,

(1')　(b) *Ngaju parnka-mi.

　　　(c) *Ngaju wanti-ja.

This is another contrast between verbal and nominal predicators.

The range of meanings covered by nominal predicators embraces not only concepts typically associated with the noun and adjective categories of other languages, but also concepts associated with the category of stative verbs, e.g.:

/ngampurrpa/	'desirous'	(cp. 'to want')
/jukuru/	'apathetic'	(cp. 'not to want')
/pina/	'knowing'	(cp. 'to know')
/ngurrpa/	'ignorant'	(cp. 'not to know')

However, unlike verbs, whose principal grammatical function is predicative, nominals have a variety of other functions. Morphologically, they are clearly opposed to the class of verbs and are associated with a distinct system of nominal inflections described in detail in Nash 1980. While the Warlpiri verb has an infinitive form, which is in effect a nominalization of the verb, the verbal theme cannot enter directly into the nominal morphology. Verbal and nominal inflections belong to utterly distinct systems in Warlpiri — the verbal-nominal opposition is thus clear-cut and fundamental. The primary area of overlap consists in the syntactic fact that both categories may function predicatively.

In the following sections, a more detailed treatment of Warlpiri sentence patterns will be given. My attention here will be focused upon the verbal sentence rather than on the non-verbal sentence.

1. THE ERGATIVE-ABSOLUTIVE CASE SYSTEM AND THE PRINCIPAL VERBAL SUBCATEGORIES

The minimal tensed clause in Warlpiri consists of an inflected verb, the argument(s) thereof, and an auxiliary. The auxiliary (AUX) is briefly discussed in a variety of sources (Hale 1973, 1976; Nash 1980). It consists, abstractly speaking, of 1) a base, functioning in concert with the verbal inflections to mark tense, mood, and aspect, and 2) pronominal suffixes indicating person and number of the principal arguments of the verb (i.e. subject, object).

The principal arguments of the verb, when overtly represented by noun phrases, participate in a system of case marking which conforms to the so-called ergative-absolutive type. According to this pattern of case marking, the subject of an intransitive sentence and the direct object of a transitive sentence are treated alike — in Warlpiri they are in the absolutive (ABS) cas , which is phonologically unmarked — and they are jointly opposed to the subject of a transitive sentence, which is especially marked for case. The pattern is exemplified in the following sentences:

(3) (a) Marlu ka parnka-mi.
kangaroo AUX run-NPST
'The kangaroo is running.'

(b) Ngarrka ka wangka-mi.
man AUX speak-NPST
'The man is speaking.'

(c) Marlu-ngku ka ngarrka nya-nyi.
kangaroo-ERG AUX man see-NPST
'The kangaroo sees the man.'

(d) Ngarrka-ngku ka marlu panti-rni.
man-ERG AUX kangaroo spear-NPST
'The man is spearing the kangaroo.'

Notice that the subjects of (3a-b) and the objects of (3c-d) are treated in identical fashion, from the point of view of case marking; they are unmarked, or absolutive. But the subjects of (3c-d) are marked for case, by suffix. This is typical of the ergative system of case marking. Following established tradition, I will refer to the ending appearing on the subjects of (3c-d) as the 'ergative' (ERG) ending. It has two distinct alternants in Warlpiri (and in many other Australian languages as well; see, for example, Dixon 1976). The selection of ergative alternants, with marginal exceptions, is governed by the following simple principle: the velar-initial alternant /-ngku/ appears on disyllabic stems (as in 3c-d above), while a lateral-initial alternant /-rlu/ appears on stems longer than disyllabic. (For the purposes of this principle, long vowels, written VV, count as disyllabic.) The second alternant is observed in the following sentences:

(4) (a) Japanangka-rlu ka marlu panti-rni.
japanangka-ERG AUX kangaroo spear-NPST
'Japanangka (i.e. a person designated by the subsection name /japanangka/) is spearing the kangaroo.'

(b) Maliki-rli ka kurdu yarlki-rni.

dog-ERG AUX child bite-NPST

'The dog is biting the child.'

The vocalism of the ergative ending in (4b) conforms to an extremely general rule of Warlpiri phonology according to which suffixal /u/ assimilates to a preceding stem-final /i/. The same assimilation rule applies to the velar-initial alternant of the ergative ending as well, of course, as can be seen in the following:

(5) Wati-ngki ka wawirri panti-rni.

man-ERG AUX kangaroo spear-NPST

'The man is spearing the kangaroo.'

The meaning of (5) is the same as (3d); the two sentences illustrate an interesting feature of the Warlpiri lexicon, namely the existence of synonymous sets (consisting of two or more phonologically distinct morphs) for an extraordinarily large number of concepts. This is especially noticeable in the nominal lexicon, but it is to some extent true of verbs and minor categories as well. I mention this feature of Warlpiri here so that the reader will not be surprised to see phonologically distinct items identically glossed in the illustrative examples.

Before proceeding, an additional aside should be made concerning the format in which Warlpiri examples are presented. No attempt is made to ensure that the English translations, given in single quotes, cover the full range of meanings of the Warlpiri. In particular, except where an overt determiner is present, the Warlpiri examples do not specify definiteness in the noun phrases. Hence, any natural English rendition is necessarily more specific in this regard than is the Warlpiri. For the most part, I arbitrarily choose to use the definite article in the English translations. The reader should not infer from this that the corresponding noun phrase is necessarily definite in Warlpiri. With regard to the analytic glossing, major lexical items are written in their conventional English spellings, while suffixes are in upper case (often in the form of abbreviations, e.g. DAT for 'dative', NPST for 'non-past', and so on). Unless it is relevant to the discussion, the auxiliary is left unanalyzed and glossed AUX. Where the AUX is subanalyzed, the base is glossed in upper case (e.g. PRES for 'present tense auxiliary base', FUT for the 'future' base, and so on), and person marking suffixes are glossed by means of numerals (e.g. 1 for 'first singular', 11 for 'first dual exclusive', 12 for 'first dual inclusive', 22 for 'second dual', 333 for 'third plural', and so on). Hyphenation in the Warlpiri is used simply as an analytical aid for the reader and is not intended to conform to the hyphenation practices which have been adopted or are under consideration in the Warlpiri community. Word divisions conform to accepted Warlpiri conventions; thus auxiliaries beginning in the zero base or in the imperfective base /-lpa/ are attached, in writing, to the word preceding them. All other auxiliaries are written unattached.

Returning now to the Warlpiri patterns of case marking, I should mention at the outset that the ergative-absolutive (ERG-ABS) combination is not the only case array which exists for two-argument verbs. A prominent second pattern is illustrated in the sentences of (6) below, in which the subject is absolutive while the object is marked for a case category which is traditionally called the 'dative' (DAT) in the Australianist literature (cf. Dixon 1980 and Dixon 1976):

(6) (a) Kurdu ka-rla ngarrka-ku parda-rni.

child PRES-rla man-DAT wait-NPST

'The child is waiting for the man.'

(b) Marlu ka-rla maliki-ki jija-mi.

kangaroo PRES-rla dog-DAT succumb-NPST

'The kangaroo is succumbing to the dog.'

The variable vocalism of the dative ending is due to the assimilation rule mentioned in connection with (4b) above. The element /-rla/ appearing in the auxiliary is not a person marker in the usual sense; rather, it is what Perlmutter (personal communication) has called a 'registration' marker. In this instance, it signals the presence of a third singular dative argument.

These two most conspicuous case arrays — the ERG-ABS array and the ABS-DAT array — will be discussed in detail in subsequent paragraphs.

My identification of Warlpiri case marking as 'ergative' conforms to the traditional usage according to which the sentence type employing the ABS-DAT array (not considered 'fully transitive') is left out of consideration in assessing the typological position of the system as a whole. The assessment is made solely upon the comparison exemplified in (3) above. Within this traditional scheme, the Warlpiri system of case marking is classically ergative, since it accords uniform treatment to the intransitive subject and the transitive object while opposing these two functions jointly to the transitive subject. Crucial to this definition, however, are the notions 'subject' and 'object', and it is appropriate here to mention at least one criterion by which they can be identified with ease and without ambiguity. A variety of behavioral properties are associated with the subject and object relations, but person-number agreement is the most readily observable.

As mentioned above, the auxiliary includes pronominal suffixes in agreement with the principal arguments of the verb. These person markers occur in two sets, one of which is construed with subjects, the other with objects. The full system is described elsewhere (Hale 1973), but enough will be introduced here to reveal the basic principle involved.

In sentences like (3a-d) above, it is not possible to observe the behavior of the person marking system because of the simple fact that third person singular, whether subject or object, is not overtly marked in the auxiliary. But if the noun phrases in (3a-d) are replaced by corresponding non-singular forms, the person marking becomes clearly visible. Thus, consider the following sentences, parallel to (3a-d) but with the subject noun phrases in a plural number (glossed PL):

(7) (a) Marlu-patu ka-lu parnka-mi.
kangaroo-PL PRES-333 run-NPST
'The (several) kangaroos are running.'

(b) Ngarrka-patu ka-lu wangka-mi.
man-PL PRES-333 speak-NPST
'The (several) men are speaking.'

(c) Marlu-patu-rlu ka-lu ngarrka nya-nyi.
kangaroo-PL-ERG PRES-333 man see-NPST
'The (several) kangaroos see the man.'

(d) Ngarrka-patu-rlu ka-lu marlu panti-rni.
man-PL-ERG PRES-333 kangaroo spear-NPST
'The (several) men are spearing the kangaroo.'

And consider the following, parallel to (3c) and (7c) but with the object in the plural:

(8) (a) Marlu-ngku ka-jana ngarrka-patu nya-nyi.
kangaroo-ERG PRES-333 man-PL see-NPST
'The kangaroo sees the (several) men.'

(b) Marlu-patu-rlu ka-lu-jana ngarrka-patu nya-nyi.
kangaroo-PL-ERG PRES-333-333 man-PL see-NPST
'The (several) kangaroos see the (several) men.'

In sentences (7a-b), the element /-lu/ is required in the auxiliary because of the plural noun phrases /marlu-patu/ 'the (several) kangaroos' and /ngarrka-patu/ 'the (several) men'. If we assume, as is customary, that the sole argument in an intransitive sentence of this simple type is to be identified as the 'subject', then we can say that /-lu/ is associated with the subject relation — it serves to indicate that the subject argument is third person plural. Now let us assume further, following customary practice again, that /-lu/ fulfills this same function in transitive sentences. This enables us to determine which of the two case categories — ergative or absolutive — is to be associated with the subject relation in transitive sentences. As is quite evident from our sample, it is the ergative case which is associated with the subject relation, since an ergatively marked plural noun phrase requires /-lu/ in the auxiliary. By the same sort of reasoning, we can determine that the element /-jana/ is associated with the object relation. It serves to indicate that the object argument is third person plural.

Now if the grammatical relations 'subject' and 'object', as identified in terms of the agreement system, are aligned with the case system, the classical ergative pattern emerges: intransitive subject and transitive object are in the absolutive, while transitive subject is in the ergative.

Precisely the same picture emerges when we consider sentences in which the arguments are first or second person. Thus consider

(9) (a) Ngaju ka-rna wangka-mi.
I PRES-1 speak-NPST
'I am speaking.'

(b) Nyuntu ka-npa wangka-mi.
you PRES-2 speak-NPST
'You are speaking.'

(c) Ngajulu-rlu ka-rna marlu nya-nyi.
I-ERG PRES-1 kangaroo see-NPST
'I see the kangaroo.'

(d) Nyuntulu-rlu ka-npa marlu panti-rni.
you-ERG PRES-2 kangaroo spear-NPST
'You are spearing the kangaroo.'

(e) Marlu-ngku ka-ju ngaju nya-nyi.
kangaroo-ERG PRES-1 me see-NPST
'The kangaroo sees me.'

(f) Ngajulu-rlu ka-rna-ngku nyuntu nya-nyi.
I-ERG PRES-1-2 you see-NPST
'I see you.'

(g) Nyuntulu-rlu ka-npa-ju ngaju panti-rni.
you-ERG PRES-2-1 me spear-NPST
'You are poking (spearing) me.'

From these sentences it is quite clear that the first and second singular person markers /-rna/ and /-npa/ are associated with the subject relation, while the corresponding markers /-ju/ and /-ngku/ are associated with the object relation.

We can arrange the person markers so far illustrated (including the null forms corresponding to the third person singular) in the following table, which portrays the person and number of each marker together with the grammatical relation with which it is associated:

(10)

	subj	obj
1	-rna	-ju
2	-npa	-ngku
3	zero	zero
333	-lu	-jana

With certain exceptions (see Hale 1973 for details) person markers of the two sets appear in the relative order *subj-obj* when they co-occur in the auxiliary. Their construal — i.e. their association with overt noun phrases — can be stated strictly in terms of the case system. We may formulate the principle of subject construal as follows:

(11) Subject Construal

Person markers belonging to the *subj* set are construed with the ergative, if there is one, otherwise the absolutive.

The disjunction {ergative, absolutive} plays a role in other areas of Warlpiri grammar where the identification of the subject is at issue (e.g. control). The construal rule formulated in (11) above will pick out the ergative noun phrase in a transitive sentence of the type represented by (3c-d), (7c-d), (8a-b) and (9c-g), and it will pick out the absolutive noun phrase in the intransitive type represented by (3a-b), (7a-b) and (9a-b). Notice also that this rule will pick out the absolutive noun phrase, for construal with the *subj* set of person markers, in ABS-DAT sentences of the type represented by (6a-b) above. That this is indeed the correct subject construal is shown by the following sentences, chosen not only to illustrate subject construal but also to reveal the full principle involved in object construal as well:

(12) (a) Kurdu-patu ka-lu-rla ngarrka-ku parda-rni.
child-PL PRES-333-rla man-DAT wait-NPST
'The (several) children are waiting for the man.'

(b) Kurdu ka-jana ngarrka-patu-ku parda-rni.
child PRES-333 man-PL-DAT wait-NPST
'The child is waiting for the (several) men.'

(c) Kurdu-patu ka-lu-jana ngarrka-patu-ku parda-rni.
child-PL PRES-333-333 man-PL-DAT wait-NPST
'The (several) children are waiting for the (several) men.'

(d) Ngaju ka-rna-rla kurdu-ku parda-rni.
I PRES-1-rla child-DAT wait-NPST
'I am waiting for the child.'

(e) Ngaju ka-rna-jana kurdu-patu-ku parda-rni.
I PRES-1-333 child-PL-DAT wait-NPST
'I am waiting for the (several) children.'

(f) Kurdu ka-ju ngaju-ku parda-rni.
child PRES-1 me-DAT wait-NPST
'The child is waiting for me.'

(g) Ngaju ka-rna-nkgu nyuntu-ku parda-rni.
I PRES-1-2 you-DAT wait-NPST
'I am waiting for you.'

These data suggest that (11) is the proper rule for subject construal and, moreover, that the following is the appropriate formulation for object construal:

(13) Object Construal

> Person markers belonging to the *obj* set are construed with the dative, if there is one, otherwise the absolutive.

The full implications of this formulation will become evident in a later subsection (1.6) when three-argument verbs are discussed. The role of the disjunction {dative, absolutive} in identifying the object relation is also manifest in other areas of Warlpiri grammar. For the present, it is sufficient to note that (13) will correctly select the dative noun phrase for object construal in two-argument sentences exhibiting the ABS-DAT case array, and it will select the absolutive for object construal in the 'classically transitive' two-argument sentences exhibiting the ERG-ABS array. The full account must also, of course, provide for the 'registration' within the auxiliary (by means of the element /-rla/) of a third singular dative in sentences of the type represented by (6) and (12a,d). (See Hale 1973 for some discussion.)

The foregoing has outlined the essential features of the ergative case system of Warlpiri. It should be mentioned at this point — though it will become increasingly obvious as we proceed — that Warlpiri shows relatively little ergativity in its grammar as a whole. In fact, the case system just outlined is the principal manifestation of ergativity in Warlpiri. As we have seen, the agreement system operates according to the 'accusative' principle in which subjects — whether of transitive or intransitive sentences — are treated uniformly and in opposition to the objects of transitive sentences. (See the papers in Dixon 1976 for discussions of ergative as opposed to accusative systems.) Warlpiri is predominantly accusative, not ergative, and it properly belongs to the type sometimes designated 'morphologically ergative' (cf. Comrie 1978) by virtue of the fact that the major manifestation of ergativity is in the case marking of noun phrases.

The three case categories so far mentioned — ergative, absolutive, and dative — by no means exhaust the inventory of Warlpiri cases. However, these three constitute the set to which I will refer by means of the term 'grammatical cases' and which I will oppose to a numerically larger set of 'semantic cases'. The distinction between grammatical and semantic cases is fundamental in Warlpiri and its validity will become evident enough as we proceed. For the present, we can mention one readily appreciable contrast between the two, namely their behavior with respect to the agreement phenomena just introduced: grammatical cases are construed with person markers in the auxiliary, while semantic cases are not.

From the point of view of meaning and general function, the semantic cases correspond to various 'oblique' categories, such as locative, allative, elative, etc. It is possible, also, that the 'complementizer' suffixes appearing on infinitival subordinate clauses in Warlpiri should also be viewed as a special subvariety within the class of semantic cases since, morphologically and in other respects as well, they share many features with the elements conventionally classified as semantic cases. The semantic cases of Warlpiri will be catalogued fully in section 2, but I briefly exemplify here the 'locative' (LOC /-ngka ∿ -rla/) with alternants selected according to the same principle as that which operates in the ergative (see above), the 'allative' (ALL /-kurra/ indicating the end-point of motion or trajectory), and the 'elative' (EL /-ngurlu/ indicating the starting-point of motion or trajectory). Notice, in particular, that noun phrases marked with these cases are not 'co-indexed' in the auxiliary:

(14) (a) Kurdu ka ngaju-kurra ya-ni-rni.
child PRES me-ALL go-NPST-HITHER
'The child is coming to me.'

(b) Ngalipa kapi-rlipa pirli-patu-rla nyina-mi.
we FUT-122 stone-PL-LOC sit-NPST
'We (plural inclusive) will sit on the (several) stones.'

(c) Kurdu-patu ka-lu ngaju-ngurlu parnka-mi-rra.
child-PL PRES-333 me-EL run-NPST-THITHER
'The (several) children are running from me (i.e. from the place where I am).'

In the subsections which follow (1.1-1.6), Warlpiri verbs are classified in terms of their argument structures — i.e. their 'diathesis' or 'valency', which is to say, the immediate syntactic environment in which they appear. Before embarking upon this discussion, however, it is appropriate to mention a conspicuous fact about Warlpiri sentences in natural speech. In most of the examples used heretofore, verbs which are quite correctly said to 'take' a certain number of arguments are actually exhibited with their full complement of arguments overtly expressed as noun phrases in the appropriate grammatical cases. In a significant percentage of instances in actual speech, however, these arguments would not be present as overt noun phrases — rather, their referents would, so to speak, be 'understood' through a combination of context, the known (semantic) argument structure of the verb, and the person-number marking present in the auxiliary. These 'missing noun phrases' are interpreted in essentially the same way as pronouns are interpreted in languages like English. Thus, while a verb like /parnka-mi/ 'x run' can be said, correctly, to require a subject argument (represented by the x-variable in the gloss here) — and it indeed has an overt noun phrase argument in (1b) above, for example — it may appear in perfectly well-formed sentences *without* a noun phrase corresponding to the subject function. Such sentences, with noun phrases 'missing' in this sense, are as well-formed and as appropriate in usage as are their English translations, which require pronouns in subject position:

(15) (a) Parnka-mi ka.
run-NPST PRES
'He/she/it is running.'

(b) Parnka-mi ka-rna.
run-NPST PRES-1
'I am running.'

(c) Parnka-mi ka-lu.
run-NPST PRES-333
'They are running.'

The only stricture on the acceptability of sentences like (15a,c) above is that they be used 'co-operatively' (in the sense of Lasnik 1976, for example) — i.e. that the speaker have reason to believe that the addressee knows the referents of the third person forms. The exactly analogous observation applies in the case of verbs which take more than one argument. Thus the following — with noun phrases 'missing' — are perfectly well-formed, their use being constrained only by the 'co-operation' principle:

(16) (a) Marlu ka nya-nyi.
kangaroo PRES see-NPST
'He/she/it sees the kangaroo.'

(b) Marlu-ngku ka nya-nyi.
kangaroo-ERG PRES see-NPST
'The kangaroo sees him/her/it.'

(c) Nya-nyi ka.
see-NPST PRES
'He/she/it sees him/her/it.'

(d) Nya-nyi ka-rna.
see-NPST PRES-1
'I see him/her/it.'

(e) Parda-rni ka-rna-jana.
wait-NPST PRES-1-333
'I am waiting for them.'

Although it is an interesting question, and one of some theoretical importance as well, I will not argue here for any one of the conceivable answers to the question of how sentences with 'missing' noun phrases are derived in a grammar of Warlpiri — whether by a process of 'pronoun drop' or as an option in the base-forms of sentences (but see Hale 1979, 1981). The phenomenon is mentioned here primarily to prepare the reader for illustrative examples in which one or more arguments are omitted in the above sense.

1.1 SUBJECTLESS SENTENCES

Although, as we have just seen, any Warlpiri verb may appear without overt noun phrase arguments, it is somewhat doubtful that any verbs necessarily so occur. Specifically, it is doubtful that so-called subjectless verbs exist in Warlpiri. It is possible that /rangkarr-ka-nyi/ 'it become pre-dawn', as in (17) below, is such a verb:

(17) Rangkarr-ka-nyi ka.
predawn-verb-NPST PRES
'It is becoming predawn.' (Cf. /rangkarrkurlu-rangkarrkurlu/ 'the period between midnight and sunrise')

And there may be others referring, as this one does, to diurnal phases. A verb like /munga-jarri-mi/ 'it become dark, night' (cf. /munga/ 'night, dark') is typically subjectless in expressions like

(18) Munga-jarri-mi-lki ka.
dark-INCHOATIVE-NPST-NOW PRES
'It is getting dark now.'

but it is sometimes suggested by Warlpiri speakers that the 'understood' subject is /ngurra/ 'camp, home, country', or else /nguru/ 'sky, country, area'. In any event, the verb of (18) readily accepts overt noun phrase subjects — including the suggested 'understood' subjects — and verbs of the type represented in (17), not yet documented with an overt subject, are exceedingly rare.

Weather expressions in Warlpiri are, for the most part, intransitive sentences in which an overt 'weather noun' subject — e.g. /ngapa/ 'water, rain', /payi/ 'wind' — appears with a verb whose meaning is not limited to this spere:

(19) (a) Ngapa ka wanti-mi.
water PRES fall-NPST
'It is raining.'

(b) Ngapa ka wangka-mi.
water PRES speak-NPST
'It is thundering.'

(c) Payi ka wangka-mi.
wind PRES speak-NPST
'It is windy. The wind is blowing.'

1.2 VERBS WITH A SINGLE (SUBJECT) ARGUMENT

As mentioned in the introduction to this section, stative predicators are not verbs in Warlpiri; rather, they are nominals. However, these readily combine with the derivational suffix /-jarri-mi/ 'inchoative' (INCH), which forms first conjugation intransitive verbs of process or change-of-state:

(20) wita-jarri-mi (small-INCH-) 'ABS become small'
wiri-jarri-mi (big-INCH-) 'ABS become big, grow'
ngurrju-jarri-mi (good-INCH-) 'ABS become good, improve'
maju-jarri-mi (bad-INCH-) 'ABS become bad, worsen'
nyurnu-jarri-mi (sick/dead-INCH-) 'ABS sicken, die'
palka-jarri-mi (manifest-INCH-) 'ABS become manifest, be born'
lawa-jarri-mi (absent-INCH-) 'ABS disappear, become absent'
linji-jarri-mi (desiccated-INCH-) 'ABS become desiccated'
pampa-jarri-mi (blind-INCH-) 'ABS become blind'
lani-jarri-mi (afraid-INCH-) 'ABS become afraid, frightened'
ngarrka-jarri-mi (man-INCH-) 'ABS become a man, be initiated'

N.B. When verbs are cited out of context, they are given in the nonpast form (NPST, though the ending is not glossed in out-of-context citations). The form of the nonpast ending will serve to locate the verb within the conjugation system (see Nash 1980). The English translation of Warlpiri verbs employs case-linked variables (ABS, ERG, etc.) so that the reader can see at a glance what the syntax of the Warlpiri verb is — thus 'ABS grow' indicates that the verb translates as *grow* and that it takes a single, absolutive argument in Warlpiri.

Derived inchoatives of the type represented by (20) above constitute the vast majority of process verbs in the Warlpiri lexicon. Some process verbs, however, are morphologically simple — e.g.

(21) pali-mi 'ABS die; ABS (fire) go out'

janka-mi 'ABS burn'

kampa-mi 'ABS burn (syn. of preceding)'

lirri-mi 'ABS swell'

papi-mi 'ABS ignite, catch fire'

parnti-mi 'ABS smell, emit odor'

— and a number are morphologically complex, consisting of a preverb and a verbal base:

(22) rdilyki-ya-ni (broken-go-) 'ABS break'

kaljarr-(y)a-ni (PV-go-) 'ABS melt'

yawu-pardi-mi (PV-arise/emerge-) 'ABS abate, stop (e.g. rain)'

lakarn-pardi-mi (peeling-arise/emerge-) 'ABS come unstuck, open (as flower bud)'

jarra-pardi-mi (flame-arise/emerge-) 'ABS burst into flame'

N.B. In the analytic glossing of morphologically complex verbs, a preverb not attested outside a particular combination, and therefore of unclear meaning, is simply rendered PV (= preverb). Likewise, a verbal base which does not contribute in any clear way to the meaning of the verbal theme as a whole is simply glossed 'verb' — as, for example, in /karalyarr-nga-rni/ (sliding-verb-) 'ABS slip, slide (as on slippery surface)', where the verbal element /nga-rni/ (elsewhere 'ERG eat ABS, ERG drink ABS') is not clearly related to the meaning of the theme as a whole.

Process verbs appear readily in sentences of the simplest intransitive type, i.e. sentences containing a single argument (the subject) in the absolutive case:

(23) (a) Kurdu palka-jarri-ja.
child manifest-INCH-PST
'A child was born.'

(b) Ngapa ka lawa-jarri-mi.
water PRES absent-INCH-NPST
'The water is vanishing, disappearing.'

(c) Wijini ka lirri-mi.
sore PRES swell-NPST
'The sore is swelling.'

(d) Ngapa ka yawu-pardi-mi.
water PRES PV-arise/emerge-NPST
'The rain is abating.'

(e) Puluku pali-ja.
bullock die-PST
'The bullock died.'

To this same intransitive type belong a large number of 'activity' verbs which can be classified under the rubrics of 'stance' (24), 'motion' (25), and 'sound production' (26). As is the case with process verbs, these activity verbs may be morphologically simple or complex:

(24) nyina-mi 'ABS sit, be sitting'
karri-mi 'ABS stand, be standing'
nguna-mi 'ABS lie, be lying (prone)'
parntarri-mi 'ABS crouch, be in a crouching stance'
rdalji-nyina-mi (rigid-sit-) 'ABS sit still, motionless'
rdalji-karri-mi (rigid-stand-) 'ABS stand still, rigid'
juka-karri-mi (upright-stand-) 'ABS stand sticking up'
jarda-nguna-mi (sleep-lie-) 'ABS sleep, lie asleep'

(25) ya-ni 'ABS go, move linearly'
karrka-mi 'ABS proceed (as to objective)'
yarnka-mi 'ABS set out, start out'
pardi-mi 'ABS arise, emerge, start going'
kulpa-mi 'ABS return'
yuka-mi 'ABS enter, go in'
jiti-mi 'ABS descend'
wanti-mi 'ABS fall'
parnka-mi 'ABS run, move swiftly'
warrka-rni 'ABS ascend, climb up'
karli-mi 'ABS (liquid) flow out'
jarnti-mi 'ABS limp, walk with a limp'
wapa-mi 'ABS walk about'
wirnti-mi 'ABS dance, ABS (hawk) hover'
yururri-mi 'ABS stir, move'
karlirr-(y)a-ni (diversion-go-) 'ABS turn, change direction'
karlirr-parnka-mi (diversion-run-) 'ABS turn while running'
wilypi-pardi-mi (exit-arise-) 'ABS emerge, go out'
paarr-pardi-mi (PV-arise-) 'ABS take off in flight, fly off'
rurruny-pardi-mi (detachment-arise-) 'ABS come loose, detach'
rurruny-(w)anti-mi (detachment-fall-) 'ABS detach and fall off'
rurruny-(y)a-ni (detachment-go-) 'ABS come off, detach'
wira-nga-rni (PV-verb-) 'ABS fly off (as bird)'
kinyirr-nga-rni (start-verb-) 'ABS start, leap in alarm'
karlirr-nga-rni (diversion-verb-) 'ABS turn off (as off road)'
juurl-pi-nyi (PV-verb-) 'ABS jump, hop'
pirrmarn-pi-nyi (PV-verb-) 'ABS bounce, rebound'
jiwin-pi-nyi (PV-verb-) 'ABS roll about sleeplessly'
pirri-ma-ni (PV-verb) 'ABS sit down, alight, land'

(26) wangka-mi 'ABS speak sound'
purla-mi 'ABS shout, yell'
yula-mi 'ABS cry, weep'

ngarlarri-mi 'ABS laugh'

wirnpirli-mi 'ABS whistle'

warurr-(w)angka-mi (PV-speak-) 'ABS (wings) whirr, (wind) howl,
(airplane) drone'

luyuku-yula-mi (PV-cry-) 'ABS (bees) hum, drone'

ngaarr-ma-ni (PV-verb-) 'ABS (frog) croak'

murnturr-ma-ni (PV-verb-) 'ABS (e.g. engine) roar'

taarl-ma-ni (PV-verb-) 'ABS cluck, make clucking sound, pop'

warlkurr-ma-ni (barking-verb-) 'ABS (dog) bark'

winywiny-ma-ni (PV-verb-) 'ABS whistle under breath'

The designation 'activity verb' must not be taken to mean that the subject arguments are limited to entities which are capable of voluntary action — i.e. animates, or so. A great many of these verbs accept inanimate as well as animate subjects. The stance verbs, for example, not only depict the various postures which animate beings can assume, but also the characteristic modes of being of certain inanimate entities:

(27) (a) Mingkirri ka karri-mi.
anthill PRES stand-NPST
'The anthill (i.e. termite mound) stands.'

(b) Karru ka nguna-mi.
creekbed PRES lie-NPST
'The creekbed lies, extends.'

(c) Yuwarli ka parntarri-mi.
house PRES crouch-NPST
'The house stands, is in position (lit. crouches).'

Similarly, motion verbs are appropriately used to depict situations in which an inanimate entity moves or is perceived as moving:

(28) (a) Wanta ka yuka-mi.
sun PRES enter-NPST
'The sun is setting, going down.'

(b) Ngawarra ka parnka-mi.
floodwater PRES run-NPST
'The water is running, it is flooding.'

(c) Ngapa ka ya-ni-rni.
water PRES go-NPST-HITHER
'Rain is approaching.'

And the sound-production verb /wangka-mi/ 'ABS speak, sound' can be used to describe the production of a sound characteristic of any entity whatsoever, animate or inanimate (cf. the weather expressions 19-bc above); the verb /purla-mi/ 'ABS shout, yell' is used to describe the blast of a train's whistle; and so on. In short, these verbs select subjects virtually without constraint, the sole requirement being the purely semantic, or perhaps 'pragmatic', one that the activity or stance depicted by the verb be applicable in some reasonably appropriate way to the situation in which the entity denoted by the subject is involved. But, in particular, there is no requirement that the subject be capable of voluntary action.

1.3 PROBLEMS OF TRANSITIVITY

By and large, verbs requiring only a subject argument in Warlpiri have that argument in the absolutive case. In fact, exceptions to this are quite rare, and some of the exceptions which have been noted are amenable to alternative explanation. One possible class of exceptions consists in certain verbs of performance (music and dance) which appear with overt objects in (29) below but can appear without overt objects equally well, as in (30):

(29) (a) Ngarrka-ngku ka purlapa yunpa-rni.
man-ERG PRES corroboree sing-NPST
'The man is singing a corroboree.'

(b) Ngarrka-ngku ka purlapa pi-nyi.
man-ERG PRES corroboree hit-NPST
'The man is performing/dancing (lit. hitting) a corroboree.'

(30) (a) Ngarrka-ngku ka yunpa-rni.
man-ERG PRES sing-NPST
'The man is singing.'

(b) Ngarrka-ngku ka pi-nyi.
man-ERG PRES hit-NPST
'The man is dancing (corroboree-style).'

This case is different from the 'missing noun phrase' phenomenon discussed earlier, in which the missing argument normally is interpreted as having definite reference (i.e. like definite pronouns). In (30), the missing arguments are indefinite or, better, understood constants — like those of so-called 'object deletion' verbs of English (*eat*, *drink*, etc.). The Warlpiri verbs of performance are, of course, open to various analyses. They might, for example, be regarded as special 'detransitivized' variants of the clearly transitive verbs of (29). The relationship would be analogous to that of transitive and intransitive *kick* in English, for example. But if this is so, the performance verbs fail to conform fully to the intransitive type, because their subject is in the ergative, not the absolutive. An alternative would be to regard sentences like (30) to be derived in the same way as are Warlpiri sentences with a missing, definitely interpreted, object — i.e. like (16b-d) above — with the added provision that, for the performance verbs at least, the missing object can be understood as indefinite or constant in reference. Under this conception of the problem, the relationship between the verbs of (29) and (30) would be closely analogous to that holding between the 'object-present' and 'object-deleted' uses of English *eat*, *drink*, etc. The appearance of ergative case on the subjects in (30) would then follow from the essential transitivity of the verbs.

It is relevant to point out here that the suppression of indefinite objects — to achieve the effect of the English uses of *eat*, for example — is not extensive in Warlpiri. While the performance verbs of (30) above are clearly examples of this, far more common is the indefinite use of an appropriate, semantically general noun in object function, as in

(31) (a) Karnta-patu-rlu ka-lu miyi nga-rni.

woman-PL-ERG PRES-333 food eat-NPST

'The women are eating (lit. eating vegetable food).'

(b) Ngarrka-patu-rlu ka-lu kuyu pi-nyi.

man-PL-ERG PRES-333 meat hit/kill-NPST

'The (several) men are hunting (lit. killing meat).'

(c) Kurdukurdu-rlu ka-lu puku ritiyi-ma-ni.

children-ERG PRES-333 book read-verb-NPST

'The children are reading (lit. reading books).'

(d) Ngajulu-rlu ka-rna pama nga-rni.

I-ERG PRES-1 delicacy drink-NPST

'I am drinking (lit. ingesting "delicacy", applied to beer and liquor as well as to indigenous delicacies such as honey, nectar, etc.).'

A second class of verbs with ergative subject, but lacking an overt noun phrase object, consists in the small set of morphologically complex body-function verbs illustrated in (32) below:

(32) (a) Ngarrka-ngku ka ngungkurru-pangi-rni.
man-ERG PRES snore-dig-NPST
'The man is snoring.'

(b) Kurdu-ngku ka ngaany-kiji-rni.
child-ERG PRES breath-throw-NPST
'The child is breathing, expelling breath.'

(c) Kurdu-ngku ka ngalngal-kiji-rni.
child-ERG PRES pulsing-throw-NPST
'The child is panting (from exhaustion).'

(d) Karnta-ngku ka kuntul-pi-nyi
woman-ERG PRES cough-hit-NPST
'The woman is coughing.'

In these cases, a preverb — sometimes quite clearly nominal in origin (/ngungkurru/ 'snore, snoring'; /ngaanypa/ 'breath'; /kuntulpa/ 'cough, catarrh') — appears attached to a verbal base. It is possible that these preverbs were once true objects syntactically, and that the development of these exceptional verbs came about by means of a process of incorporation. This is a reasonable etymological suggestion, but even so, the verbs of (32b-d) at least must be considered true exceptions to the generalization that single-argument verbs take absolutive subjects. The process of object incorporation is not a productive one in Warlpiri, and these verbs must be considered lexical items — analyzable ones, to be sure — which, from a strictly syntactic point of view, take a single noun phrase argument (i.e. a subject) which in turn, irregularly, appears in the ergative case. It is perhaps not surprising that the verbs of (32b-d) have also been recorded with absolutive subjects, as better befits their syntactic intransitivity. The verb of (32a) has not been so recorded, and it is quite possible that I am mistaken in treating it as a complex verbal theme rather than an idiom which, from the syntactic point of view, actually consists of a transitive verb /pangi-rni/ with a direct object /ngungkurru/. Other body-function expressions — in particular, those dealing with elimination — are quite clearly verb-object combinations:

(33) (a) Maliki-rli ka kuna ngaja-rni.
dog-ERG PRES excrement excrete-NPST
'The dog is defecating.'

(b) Puluku-rlu ka mawu ngaja-rni.

bullock-ERG PRES urine excrete-NPST

'The bullock is urinating.'

(c) Kurdu-ngku ka nyuyu kiji-rni.

child-ERG PRES spittle throw-NPST

'The child is spitting.'

(d) Ngajulu-rlu ka-rna jirrjinti kiji-rni.

I-ERG PRES-1 sneeze throw-NPST

'I am sneezing.'

Certain others are morphologically complex verbal themes built upon an intransitive base and conforming syntactically to the typical intransitive pattern — e.g. /mirrmirr-karri-mi/ 'ABS shiver' and /kuntuk-karri-mi/ 'ABS cough' (a near synonym of the verb in 32d above), based upon the stance verb /karri-mi/ 'ABS stand' which, like other stance verbs, often enters into the formation of intransitive verbal themes (with concomitant loss, or generalization, of the basic meaning).

With minor exceptions, the transitivity of verbs is extremely stable in Warlpiri. And verbs which could be said to be doubly subcategorized — as transitive and intransitive — are exceedingly rare. In concluding this subsection, however, I will mention a synonymous pair of verbs which are, to my knowledge, the only representatives of their kind — they are doubly classified, quite clearly. These are the verbs /janka-mi/ and /kampa-mi/, both meaning (a) 'ABS burn/cook' and (b) 'ERG burn/cook ABS'. The intransitive (a) and transitive (b) uses are exemplified (using /janka-mi/) in the following:

(34) (a) Warlu ka janka-mi.

fire PRES burn-NPST

'The fire is burning.'

(b) Warlu-ngku ka kuyu janka-mi.

fire-ERG PRES meat burn-NPST

'The fire is cooking/burning the meat.'

The intransitive use permits any subject whatsoever which can be consumed by fire or which can be cooked — by fire or by the sun (i.e. ripened). The transitive use is appropriate with any subject which can be hot enough to cause a burn or a burning sensation (e.g. hot sand, hot metal, hot tea, the sun, and so on), and the object can be anything which can be consumed by fire, burnt, cooked, or is capable of feeling a burning sensation. The verb is not appropriate for describing the situation in which heat is used as an instrument by an animate agent. The appropriate verb in this case is /purra-mi/ 'ERG burn/cook ABS', as in

(35) (a) Ngarrka-ngku ka kuyu purra-mi.
man-ERG PRES meat burn-NPST
'The man is cooking meat.'

(b) Kalaka-npa-ju purra-mi.
ADMON-2-1 burn-NPST
'You are liable to burn me.'

1.4 VERBS WITH TWO ARGUMENTS

In the introduction to the ergative system of case marking above, it was pointed out that two-argument verbs in Warlpiri fall predominantly into two large classes — those which select the ERG-ABS case array (as in 3c-d), and those which select the ABS-DAT array (as in 6). This subcategorization of verbs is certainly not random, and it is appropriate to require of a description of Warlpiri grammar that the principle underlying it be determined, in so far as possible. The principle is evidently a semantic one, and some insight into it can be gained by examining derived verbs whose semantics are, to some extent at least, perspicuous.

Recall (sec. 1.2) that a large number of intransitive process and change-of-state verbs are formed from nominals by means of the inchoative suffix /-jarri-mi/. Warlpiri also possesses a causative suffix /-ma-ni/ which is added to nominals to form fifth conjugation transitive verbs selecting the ERG-ABS case array:

(36) wita-ma-ni (small-CAUS-) 'ERG cause ABS to become small'

wiri-ma-ni (big-CAUS-) 'ERG cause ABS to become big; ERG raise ABS (as person raises a child)'

ngurrju-ma-ni (good-CAUS-) 'ERG cause ABS to become good; ERG fix ABS; ERG make ABS'

maju-ma-ni (bad-CAUS-) 'ERG ruin ABS; ERG make ABS sick'

nyurnu-ma-ni (sick/dead-CAUS-) 'ERG make ABS sick; ERG kill ABS'

palka-ma-ni (manifest-CAUS-) 'ERG find ABS; ERG (woman) conceive ABS (child)' lawa-ma-ni (absent-CAUS-) 'ERG deplete ABS; ERG finish ABS'

linji-ma-ni (desiccated-CAUS-) 'ERG desiccate ABS'

pampa-ma-ni (blind-CAUS-) 'ERG blind ABS'

lani-ma-ni (afraid-CAUS-) 'ERG frighten ABS'

ngarrka-ma-ni (man-CAUS-) 'ERG initiate ABS to manhood'

These are clearly causative counterparts to the process verbs listed in (20) above. Moreover, the semantics of their arguments are quite straightforward — the ergative subject corresponds to the agent of causation and the absolutive object corresponds to the patient, i.e. the entity which undergoes the process or change of state involved in the meaning of the verbal theme.

It is reasonable, in light of this, to suggest that the principle which governs the selection of the ERG-ABS case array is intimately associated with the semantic predicate 'cause'. Thus if the verb denotes an activity in which one entity (the agent) brings about, or causes, a process or other state of affairs directly affecting a second entity (the patient, or 'theme' in the sense of Gruber 1965, Jackendoff 1972, 1974), then that verb selects as its basic case array the ERG-ABS, with the ergative subject corresponding to the agent and the absolutive object corresponding to the patient. This seems quite appropriate not only for the semantically perspicuous derived verbs of (36) above but also for a large number of morphologically simple verbs and for certain complex verbal themes built upon other patterns of derivation. Thus, also belonging to the ERG-ABS subcategory are verbs of physical transfer and holding (37), depicting events in which, very roughly, an agent causes a patient to move, to change location or to remain in a location, as well as various 'affective' verbs (38), depicting events in which an agent produces an effect (change, damage or injury, or the like) upon a patient:

(37) yilya-mi 'ERG send ABS; ERG cause ABS to go'

yirra-rni 'ERG put ABS, ERG position ABS'

yirrpi-rni 'ERG insert ABS; ERG cause ABS to enter, go in'

kiji-rni 'ERG throw ABS, ERG drop ABS; ERG cause ABS to fall'

marda-rni 'ERG hold ABS; ERG have ABS'

ka-nyi 'ERG carry ABS, ERG transport ABS'

ma-ni 'ERG get ABS, ERG take ABS'

jakurr-yirra-rni (lift-put-) 'ERG put ABS up'

nyina-nja-yirra-rni (sit-INF-put-) 'ERG put ABS in a sitting position' karri-nja-yirra-rni (stand-INF-put-) 'ERG put ABS in a standing position'

nguna-nja-yirra-rni (lie-INF-put-) 'ERG put ABS in prone position'

jinarn-kiji-rni (tripping-throw-) 'ERG trip ABS; ERG cause ABS to stumble and fall'

puuly-marda-rni (PV-hold-) 'ERG catch ABS'

jirri-marda-rni (PV-hold-) 'ERG secure ABS, hold ABS securely'

rarra-ka-nyi (dragging-transport-) 'ERG drag ABS'

jakurr-ka-nyi (lift-transport-) 'ERG carry ABS uplifted'

wajili-pi-nyi (running-verb-) 'ERG chase ABS'

muru-pi-nyi (PV-verb-) 'ERG insert ABS'

wilypi-ma-ni (exit-take-) 'ERG extract ABS, take ABS out'

jakurr-ma-ni (lift-take-) 'ERG lift ABS up'

(38) tirlpi-mi 'ERG chip ABS by percussion (as in making a stone tool)'

nyurla-mi 'ERG knead ABS'

paka-rni 'ERG strike ABS'

paji-rni 'ERG cut ABS; ERG tear ABS (as with tooth or claw); ERG break ABS (a horse)'

panti-rni 'ERG pierce/poke ABS; ERG spear ABS'

kati-rni 'ERG press on ABS, step on ABS; ERG weigh ABS down'

luwa-rni 'ERG pelt ABS, hit ABS with missile thrown; ERG shoot ABS; ERG (missile) hit ABS by flying through the air or falling'

yurrpa-rni 'ERG grind ABS (as seed, ochre)'

maja-rni 'ERG straighten ABS'

wardi-rni 'ERG straighten ABS'

jarnti-rni 'ERG trim ABS (as boomerang); ERG scratch ABS; ERG shave ABS'

yarlki-rni 'ERG bite ABS'

pi-nyi 'ERG hit ABS; ERG kill ABS; ERG damage ABS (in accordance with primary means available to agent — e.g. 'bite' of dog; 'hit, punch' of person; 'cause to suffer, pierce' of cold air, etc.)'

nga-rni 'ERG ingest ABS; ERG eat ABS, drink ABS'

wily-paka-rni (PV-strike-) 'ERG whip ABS'

rdawirn-paji-rni (sawing-cut-) 'ERG cut ABS by sawing'

rdawirn-(y) urrpa-rni (sawing-grind-) 'ERG file ABS with sawing motion'

rdilyki-pi-nyi (broken-hit-) 'ERG break ABS'

palu-pi-nyi (die-hit-) 'ERG extinguish ABS (fire)'

To these lists must be added the verb /yampi-mi/ 'ERG refrain from affecting ABS; ERG leave ABS alone; ERG reject ABS' which functions as a universal antonym to verbs of this transitive type.

Although it is premature at this point to claim that the semantics of Warlpiri verbs like those in (37) and (38) are fully understood, it is nonetheless quite evident that the semantic predicate 'cause' is involved in most, if not all, of them. Certain of them are evidently the causative counterparts of intransitive verbs listed earlier. In some cases this relationship is evident from the morphological make-up of the paired verbs, e.g.:

intransitive	transitive
/rdilyki-ya-ni/ 'ABS break'	/rdilyki-pi-nyi/ 'ERG break ABS'
/pali-mi/ 'ABS go out (of fire)'	/palu-pi-nyi/ 'ERG extinguish ABS (fire)'
/karri-mi/ 'ABS stand'	/karri-nja-yirra-rni/ 'ERG put ABS in a standing position'

But certain simple verb themes are also felt to form such pairs, at least in a portion of the ranges of their meanings, e.g.:

/ya-ni/ 'ABS go'	/yilya-mi/ 'ERG send ABS'
/yuka-mi/ 'ABS enter'	/yirrpi-rni/ 'ERG insert ABS, cause ABS to enter'
/wanti-mi/ 'ABS fall'	/kiji-rni/ 'ERG drop ABS'

Compare the last example to the complex pair

/ngardaly-(w)anti-mi/ inversion-fall- 'ABS turn over, flip over'	/ngardaly-kiji-rni/ inversion-throw- 'ERG turn ABS over, ERG flip ABS over'

I take it as reasonably well established by the above considerations that the selection of the ERG-ABS case array correlates semantically with the causative structure, and that the ergative case is aligned with the agent of causation while the absolutive is aligned with the patient. The use of the term 'agent' here should not be taken to imply that the subject in such transitive sentences is limited to entities which act wilfully to produce an effect upon the patient. The choice of subjects is in fact extremely free in Warlpiri, the only requirement being that the entity denoted by the subject be appropriately viewed as capable of causing the effect depicted by the verb. Thus, for example, the following sentences are perfectly natural:

(39) (a) Pirriya-rlu ka-ju panti-rni.

cold-ERG PRES-1 pierce-NPST

'The cold (air) is piercing me (and causing me discomfort or harm).'

(b) Kuntulpa-rlu ka karnta pi-nyi.

catarrh-ERG PRES woman hit-NPST

'The catarrh/cough is hitting the woman (and causing her to suffer).'

(c) Warlu-ngku ka kurdu kati-rni.

firewood-ERG PRES child press-NPST

'The (load of) firewood is weighing the child down (i.e. is too heavy for it).'

(d) Pirli-ngki ka-lu murdukayi luwa-rni.

stone-ERG PRES-333 motorcar pelt-NPST

'The stones (thrown up by tires) are pelting the motorcar.'

(e) Marna-ngku ka nantuwu jinarn-kiji-rni.

spinifex-ERG PRES horse tripping-throw-NPST

'The spinifex grass is tripping the horse (causing it to stumble).'

The association of the ERG-ABS array with causation is substantiated further when this array is contrasted with the other principal two-argument array, the ABS-DAT. Verbs selecting the latter array have the property that their absolutive subjects, far from being agents of causation, correspond rather to the entity most directly affected by the process depicted by the verb — i.e. they correspond more closely to the 'patient' or 'experiencer' role than to the 'agent' role — while their dative objects correspond to entities which are themselves unaffected by the process but are related to it in a variety of other ways — e.g. the source of an emotion, the object of an encounter, the object of a quest, a beneficiary, and so on.

There is a tacit convention in much Australianist literature according to which verbs of the ABS-DAT category are not regarded as 'fully transitive' in comparison with verbs of the ERG-ABS category. There is some justice in this, and I will adhere to this somewhat narrow, and perhaps technically incorrect, use of the term 'transitive', reserving it for verbs with ergative subjects. A great many ABS-DAT verbs are appropriately classified as taking an optional dative argument, so that in one of their uses they are in fact intransitive in the technical sense. Moreover, many of them are formed by means of the inchoative derivational suffix /-jarri-mi/ which figures so prominently in the formation of intransitive verbs, for example:

(40) wardinyi-jarri-mi 'ABS rejoice; ABS rejoice in DAT'

nyurunyuru-jarri-mi 'ABS hate/despise DAT'

mari-jarri-mi 'ABS pity DAT, feel sorry for DAT'

kulu-jarri-mi 'ABS get angry; ABS be angry at DAT'

wajampa-jarri-mi 'ABS worry about DAT, become anxious about DAT'

yirraru-jarri-mi 'ABS be homesick, lovesick; ABS pine for DAT,
become homesick for DAT'

lani-jarri-mi 'ABS be afraid; ABS fear DAT, be afraid of DAT'

yikirrinji-jarri-mi 'ABS avoid DAT, abstain from DAT'

The semantic argument structure of these verbs is quite uniform. The verbs depict various emotions or reactions of which the entity denoted by the subject is the experiencer, while the dative object corresponds to the source, or cause, of the emotion or reaction. The full inventory of ABS-DAT verbs is extremely heterogeneous semantically, by comparison with the rather perspicuous verbs in /-jarri-mi/, but they are nonetheless consistent in terms of the semantic role of the absolutive subject — the subject is never the agent of causation in any sense akin to the characteristic role of the subject of a paradigm ERG-ABS verb. Additional ABS-DAT verbs are listed in (41) below:

(41) wangka-mi 'ABS speak; ABS speak to DAT'

purla-mi 'ABS shout/yell; ABS shout to DAT'

ngurnturri-mi 'ABS grumble at DAT'

rdipi-mi 'ABS encounter DAT, come upon DAT'

japirdi-mi 'ABS make threat against DAT (behind back, not
face-to-face)'

yulka-mi 'ABS cherish DAT, love DAT'

kapati-mi 'ABS feel uneasy in DAT (place or situation)'

jija-mi 'ABS succumb to DAT'

waraparnpi-mi 'ABS announce DAT, mention name of DAT'

wapal-wangka-mi (search-speak-) 'ABS guess at DAT, verbally search for DAT'

wapalwapal-wapa-mi (search 2-walk-) 'ABS move about in search of DAT'

parda-rni 'ABS wait for DAT'

rdanpa-rni 'ABS accompany DAT'

yura-ka-nyi (PV-verb-) 'ABS stalk DAT, sneak up on DAT'

The reader will have noticed, no doubt, that the conjugation membership of verbs correlates to a large extent with transitivity - in the narrow sense. Thus, of the two most populous conjugations of morphologically simple verb themes — i.e. those whose stems are disyllabic or longer — the 'first' conjugation (with NPST in /-mi/) predominates among verbs taking an absolutive subject, while the 'second' conjugation (with NPST in /-rni/) predominates among verbs taking an ergative subject. There are, to be sure, exceptions in both directions, but the correlation is quite strong. This is another respect in which the ABS-DAT verbs appear to exhibit intransitive characteristics — they are predominantly first conjugation verbs.

The evidence adduced so far indicates that the case array associated with a two-argument verb is to a very large extent predictable. However, our knowledge of the meanings of Warlpiri verbs is not very detailed, and there are numerous apparent exceptions to the principal correlation we have observed above. Thus, for example, it is not clear at this stage of our knowledge whether causation is in any way involved in the semantics of verbs of perception and mental apprehension, yet these are typically ERG-ABS verbs:

(43) nya-nyi 'ERG see ABS; ERG look at ABS'

kari-nya-nyi (other-see-) 'ERG visually misapprehend ABS'

purda-nya-nyi (PV-see-) 'ERG hear ABS; ERG listen to ABS;
ERG feel ABS (a sensation);
ERG understand ABS;
ERG ponder ABS;
ERG remember ABS'

kanginy-purda-nya-nyi (erringly-PV-see-) 'ERG mishear ABS;
ERG misunderstand ABS'

manngi-nya-nyi (PV-see-) 'ERG figure out ABS; ERG recall ABS to mind'

miyimiyi-nya-nyi (scrutiny-see-) 'ERG scrutinize ABS, inspect ABS; ERG take aim at ABS'

parnti-nya-nyi (smell-see-) 'ERG smell ABS, perceive odor of ABS'

parnti-pura-mi (smell-follow-) 'ERG follow scent of ABS (as bees follow scent of blossoms)'

milya-pi-nyi (PV-verb-) 'ERG know ABS, recognise ABS'

kanginy-pi-nyi (erringly-verb-) 'ERG not know ABS, fail to recognise ABS'

parlu-pi-nyi (PV-verb-) 'ERG catch sight of ABS'

All but the first of these verbs are morphologically complex, and the strictly verbal portions of the complex themes exist independently as ERG-ABS verbs (i.e. /nya-nyi/ 'ERG see ABS', /pi-nyi/ 'ERG hit ABS, etc.' and /pura-mi/ 'ERG follow ABS'). It is interesting, nonetheless, that this subdomain of the verbal lexicon should consist primarily of verbal themes taking the ERG-ABS case array. ABS-DAT verbs in this domain are quite rare. An example is /kanginy-karri-mi/ (erringly-stand-) 'ABS fail to recognize DAT', which is a near synonym of the ERG-ABS verb /kanginy-pi-nyi/ appearing in the list (43) above.

1.5 ANOTHER TWO ARGUMENT-PATTERN

Of somewhat more marginal status among Warlpiri two-argument patterns is the ERG-DAT case array. The paradigm verb selecting this array is /warri-rni/ 'ERG seek DAT', as exemplified in the sentences of (44) below:

(44) (a) Ngarrka-ngku ka-rla karli-ki warri-rni.
man-ERG PRES-rla boomerang-DAT seek-NPST
'The man is looking for a boomerang.'

(b) Karnta-patu-rlu ka-lu-rla kurdu-ku warri-rni.
woman-PL-ERG PRES-333-rla child-DAT seek-NPST
'The (several) women are looking for the child.'

(c) Karnta-ngku ka-jana kurdukurdu-ku warri-rni.
woman-ERG PRES-333 children-DAT seek-NPST
'The woman is looking for the children.'

As can be seen from the agreement behavior in (44b-c), the ergative argument corresponds to the subject relation while the dative corresponds to the object. This conforms exactly to the two construal principles formulated in (11) and (13) above.

The ERG-DAT case array is typically associated with 'verbs of seeking'. In addition to the 'paradigm' verb /warri-rni/ of (44), these include certain verbs which are primarily associated with the ERG-ABS array but which have secondary uses as verbs of seeking, e.g.:

(45) nya-nyi (1) 'ERG see ABS'; (2) 'ERG look about in search of DAT'

karla-mi (1) 'ERG dig up ABS (as yams)'; (2) 'ERG dig in search of DAT (e.g. yams)'

pangi-rni (1) 'ERG dig ABS (hole, well)'; (2) 'ERG dig in search of DAT (e.g. water)'

Verbs of seeking are also formed from ERG-ABS bases by means of the preverb /wapal-/ 'in search of'. Thus we also have the verbs of (46) below which, like the simple verb theme /warri-rni/, require the ERG-DAT array:

(46) wapal-karla-mi 'ERG dig in search of DAT (e.g. yams)'

wapal-pangi-rni 'ERG dig in search of DAT (e.g. water)'

Another, quite different, use of the ERG-DAT case array is illustrated in the following sentences:

(47) (a) Ngarrka-ngku ka-rla-jinta marlu-ku luwa-rni.

man-ERG PRES-rla-jinta kangaroo-DAT shoot-NPST

'The man is shooting at the kangaroo.'

(b) Kurdu-ngku ka-ju-rla ngaju-ku paka-rni.

child-ERG PRES-1-rla me-DAT strike-NPST

'The child is striking at me.'

Certain ERG-ABS verbs may be used with dative case, rather than absolutive case, on their objects to describe the situation in which the effect normally resulting from the action denoted by the verb is, for one reason or another, aborted or else is subordinated in importance to the action itself. This semantic effect, which is present in (47a-b), can be contrasted to the meanings associated with the same verbs in their 'more basic' ERG-ABS use, as in:

(48) (a) Ngarrka-ngku ka marlu luwa-rni.

man-ERG PRES kangaroo shoot-NPST

'The man is shooting the kangaroo.'

(b) Kurdu-ngku ka-ju ngaju paka-rni.

child-ERG PRES-1 me strike-NPST

'The child is striking me.'

Where these latter sentences are spoken truthfully, the effect depicted by the verb is successfully transmitted to the object.

The grammatical process involved in (47a-b) above involves more than just the use of dative case on the object; it also involves special registration in the auxiliary. The element /-rla/ appearing in (47b) is the registration marker corresponding to the special semantic effect (i.e. 'unachieved'). Normally a dative first person would be represented in the auxiliary by /-ju/ alone (as in 48b above). Where the dative object is third singular, double registration is required — the third dative object itself is registered and, in addition, there is a registration corresponding to the special semantic effect. The double registration is expressed by the sequence of elements /-rla-jinta/. It is obligatory with third singular objects. It is also possible, redundantly, where the object is other than third singular. Thus beside (47b) we also find the following:[3]

(49) Kurdu-ngku ka-ju-rla-jinta ngaju-ku paka-rni.

Not all ERG-ABS verbs are capable of entering into this construction. The construction is evidently limited to verbs whose semantic structure is 'bi-partite' in the sense that the effect caused by the agent is brought about by causing an instrument (stick, hand, missile or the like) to move against the entity denoted by the object. It is possible that the ERG-DAT array (together with the special registration in the auxiliary) is used to give prominence to the motional portion of the verbal meaning and to suppress the affective portion. This would be consistent with the use of the dative case elsewhere to indicate the goal of motion, as in the ABS-DAT use of the motion verb /ya-ni/ 'ABS go, ABS go to DAT (as to visit)', and in verbs of physical transfer and giving (see the following subsection).

1.6 THREE-ARGUMENT VERBS

Warlpiri also possesses verbs which select the three-place case array ERG-ABS-DAT. Prominent among these are verbs of physical transfer depicting the situation in which an agent (represented by the ergative subject) causes some entity (concrete or abstract, expressed by the absolutive 'direct' object) to move to or from a goal or source (represented by the dative 'indirect' object). The two verbs of giving and dispossession listed in (50) take a dative argument in all cases, while the other verbs of physical transfer — e.g. those listed in (51) — may appear with or without a dative argument:

(50) yi-nyi 'ERG give ABS to DAT'

punta-rni 'ERG take ABS away from DAT'

(51) yilya-mi 'ERG send ABS; ERG send ABS to DAT'

kiji-rni 'ERG throw ABS; ERG throw ABS to DAT; ERG put ABS (decoration) on DAT (person)'

yirra-rni 'ERG place ABS; ERG put ABS (decoration) on DAT (implement)'

ka-nyi 'ERG carry ABS; ERG carry ABS to DAT'

ma-ni 'ERG take ABS (intestines) out of DAT (slain animal)'

parnta-yirra-rni 'ERG put ABS (blanket) over DAT (e.g. child)'

milki-yirra-rni 'ERG show ABS to DAT; ERG display ABS for DAT'

Although verbs of physical transfer predominate in this pattern, there are verbs of other semantic types which may, in some of their uses, select the ERG-ABS-DAT array as well:

(52) ngarri-rni 'ERG tell ABS (things, words) to DAT'

payi-rni 'ERG ask ABS (person) about DAT'

japi-rni (synonym of preceding)

These three-argument verbs are directly relevant to the formulation of the construal principles which express the proper agreement relations between the auxiliary and case-marked noun phrase arguments.

Recall that the auxiliary includes a set of person markers construed with the subject in accordance with the principle embodied in (11) above. The auxiliary may also include person markers construed with the object, and it necessarily does if the verb takes an object argument. Now the verbs under discussion in this subsection take two arguments which qualify as 'objects' broadly defined — one in the absolutive case (the 'direct' object), the other in the dative (the 'indirect' object). But there is, strictly speaking, only one set of object markers in the auxiliary. In accordance with the principle of object construal expressed in (13) above, it is the dative object, not the absolutive, which is represented in the auxiliary in such 'double object' constructions. Thus consider the following sentences:

(53) Ngajulu-rlu kapi-rna-ngku nyuntu-ku karli-patu punta-rni.

I-ERG FUT-1-2 you-DAT boomerang-PL take-NPST

'I am going to take the (several) boomerangs away from you.'

In this sentence the direct object, represented by the absolutive /karli-patu/ '(several) boomerangs', is not recorded in the auxiliary at all. This follows from (13) which stipulates that object construal pick the dative, if there is one, otherwise the absolutive. Since sentence (53) above contains both a dative and an absolutive, the dative is construed and the absolutive is not. Notice that the absolutive in (53) could be construed with a object marker /-jana/ if it were the sole object, as it is in the following:

(54) Ngajulu-rlu kapi-rna-jana karli-patu jarnti-rni.

I-ERG FUT-1-333 boomerang-PL trim-NPST

'I will trim the (several) boomerangs.'

It should be pointed out further that when the dative is third singular and therefore not overtly represented by an object person marker *(per se*, i.e. as opposed to the registration element /-rla/), an absolutive direct object still cannot be overtly represented in the auxiliary, despite the fact that the position in which the object marker would appear is phonologically 'empty'. Thus we have

(55) Ngajulu-rlu kapi-rna-rla kurdu-ku karli-patu punta-rni.

I-ERG FUT-1-rla child-DAT boomerang-PL take-NPST

'I am going to take the (several) boomerangs away from the child.'

but not

(56) *Ngajulu-rlu kapi-rna-jana-rla kurdu-ku karli-patu punta-rni.

This, again, follows from the object construal principle of (13) above. It cannot, incidentally, be explained in terms of mutual incompatibility between the registration marker /-rla/ and overt object markers since, as we have seen in section 1.5, /-rla/ may in fact follow an overt object marker (as it does, for example, in 47b).

First and second person objects *must* be represented in the auxiliary. This requirement may come into conflict with the principle according to which the dative is selected over the absolutive when both are candidates for object construal. Thus one cannot say the following:

(57) *Ngarrka-ngku ka-ju ngaju-ku nyuntu punta-rni.

man-ERG PRES-1 me-DAT you take-NPST

'The man is taking you away from me.'

There are, of course, various ways in which the intent of (57) can, with various degrees of preciseness, be rendered in Warlpiri, but it cannot be done in this 'direct' way. One reasonably close paraphrase of (57) would be the following, using a different verbal expression with which the divestee can be represented by a semantic case (the elative) rather than by the dative:

(58) Ngarrka-ngku ka-ngku (nyuntu) ngajulu-ngurlu wuruly-ka-nyi.

man-ERG PRES-2 (you) me-EL seclusion-carry-NPST

'The man is taking you off (into seclusion) from me (or from the place where I am).'

This brings me to a final remark concerning certain of these three-argument verbs. The dative arguments receive an interpretation which corresponds closely to the meanings associated with certain semantic cases. Thus the dative argument of /yi-nyi/ 'ERG give ABS to DAT' corresponds to the semantic relation 'goal', also expressed by the allative case; and the dative argument of /punta-rni/ 'ERG take ABS away from DAT' corresponds to the semantic relation 'source', also expressed by the elative case. The verbs of physical transfer listed in (37) readily accept these semantic cases as an alternative to the dative. Thus, for example, the verb /kiji-rni/ 'ERG throw ABS ...' may appear either with a dative (as in 59a) or with an allative (as in 59b), both expressing the goal relation:

(59) (a) Ngarrka-ngku ka-rla kurdu-ku japujapu kiji-rni.

man-ERG PRES-rla child-DAT ball throw-NPST

'The man is throwing the child the ball.'

(b) Ngarrka-ngku ka japujapu kurdu-kurra kiji-rni.

man-ERG PRES ball child-ALL throw-NPST

'The man is throwing the ball to the child.'

There is a difference, however. The dative in (59a) implies that the child is the recipient of the ball, not merely the endpoint of motion. The allative in (59b), on the other hand, implies that the child — or the child's location — is merely the end-point of the trajectory traversed by the ball. This sort of distinction is consistent with the observation that the semantic cases are appropriate on any nominal which can designate a location, while the dative is more appropriate where the entity denoted by the nominal is more actively involved in the action — e.g. as recipient, divestee — or is in some way, however indirect, affected by the action. Not surprisingly, therefore, in the vast majority of actual instances the dative argument with physical transfer verbs is animate.

1.7 THE ADJUNCT DATIVE

In addition to dative arguments which are - with reason - said to be selected by a verb, there are also datives which are quite properly regarded as 'additional' to the case array associated with a verb. I will refer to these as 'adjunct' datives.

From the syntactic point of view, the adjunct dative in Warlpiri clearly belongs to the category of 'grammatical cases'. Thus, for example, it is construed with an object person marker in the auxiliary and, if third person singular, it is registered there just as an inherent dative would be. The adjunct dative figures prominently in Warlpiri by virtue of its involvement in certain grammatical processes which introduce elaborations upon the propositional content of more 'basic' predications of the type discussed heretofore in this section. Although these processes will not be discussed at great length in this essay, I will briefly exemplify the adjunct dative here since, morphologically and in gross syntactic terms, it is essentially identical to the dative which is inherent to the case arrays selected by certain Warlpiri verbs.

For expository purposes, when a basic predication is elaborated by inclusion of an adjunct dative, I will refer to it as the 'host' of the adjunct.

The simplest sort of adjunct dative, speaking from the morphological standpoint, is the 'benefactive'. This involves the mere addition of a dative argument to the case array selected by the verb of the host sentence. The meaning of the benefactive is somewhat broader than the term suggests, embracing a considerable range of possible semantic connections which may hold between an entity and an event or process described by a host predication — a range of meanings not unlike that covered by the term 'ethical dative' often employed in grammatical treatises. Consider, for example, the sentences of (60) below. The 'benefactive' and 'adversative' senses appropriately associated with (60a) and(60b) respectively are very typical, but the 'possessive' sense reflected in the alternative English translations is also quite consistent with the Warlpiri usage:

(60) (a) Ngarrka-ngku ka-rla kurdu-ku karli jarnti-rni.
man-ERG PRES-rla child-DAT boomerang trim-NPST
'The man is trimming the boomerang for the child.'
'The man is trimming the child's boomerang.'

(b) Nantuwu ka-rla japanangka-ku mata-jarri-mi.
horse PRES-rla japanangka-DAT tired-INCH-NPST
'The horse is tiring on Japanangka.'
'Japanangka's horse is tiring.'

The hose sentences of (60a-b) are presented bereft of the adjunct dative in (61a-b) below:

(61) (a) Ngarrka-ngku ka karli jarnti-rni.
man-ERG PRES boomerang trim-NPST
'The man is trimming the boomerang.'

(b) Nantuwu ka mata-jarri-mi.
horse PRES tired-INCH-NPST
'The horse is tiring (i.e. getting tired).'

Not surprisingly, an adjunct dative may co-occur with an inherent dative, i.e. it may appear together with a dative which is an inherent part of the case array selected by the verb of the host sentence. In (62) below, a benefactive argument appears as an adjunct with the verb /warri-rni/ 'ERG seek DAT' (cf. 44 above):

(62) (a) Ngarrka-ngku ka-ju-rla ngaju-ku karli-ki warri-rni.
man-ERG PRES-1-rla me-DAT boomerang-DAT seek-NPST
'The man is looking for a boomerang for me.'

(b) Ngarrka-ngku ka-rla-jinta kurdu-ku karli-ki warri-rni.
man-ERG PRES-rla-jinta child-DAT boomerang seek-NPST
'The man is looking for a boomerang for the child.'

In (62a) the first person singular benefactive argument is construed with the object person marker /-ju/, in accordance with the principles of object construal embodied in (13) above. In addition, the inherent dative object of the verb, namely the third person singular noun phrase /karli-ki/ (boomerang-DAT), is registered by means of the element /-rla/. In (62b) both the inherent dative and the adjunct dative are third singular. Accordingly, both are registered in the auxiliary. This illustrates another circumstance in which the 'double registration' is required, hence the sequence of elements /-rla-jinta/. (Cf. also the special use of the dative represented by the sentences of 47 above.)

Besides this morphologically simple usage, the adjunct dative is also employed in concert with the members of a special set of preverbs to express much more specific semantic connections between an adjunct argument and a host predication. In (63a) below, for example, the dative functions in concert with the preverb /marlaja-/ to express an indirect causal connection between the entity denoted by the adjunct dative argument, /kurdu-ku/ (child-DAT), and the event described by the host sentence (given separately as 63b):

(63) (a) Maliki-rli ka-rla kurdu-ku kuyu marlaja-nga-rni.

dog-ERG PRES-rla child-DAT meat causal-eat-NPST

'The dog is eating meat because of the child. The child brought it about that the dog is eating meat.'

(b) Maliki-rli ka kuyu nga-rni.

dog-ERG PRES meat eat-NPST

'The dog is eating meat.'

2. THE SEMANTIC CASES AND THE COMPLEMENTIZERS

In the following subsections I will be concerned with the total range of complements and adverbial categories which fall outside the realm of the grammatical cases, as defined in the preceding section, but which are marked by means of a rather rich system of case-like endings. These include both the traditional 'semantic' or 'oblique' cases and certain categories semantically analogous to various desentential complements and adverbials found widely among the languages of the world. The terminological distinction which I have drawn between cases and complementizers does not correspond to a sharp and precise classification in Warlpiri syntax or morphology. Very roughly, complementizers have the property that they readily appear on infinitival (i.e. nominalized) clauses, as well as on strictly nominal elements. Cases, by contrast, are for the most part restricted to the latter. But this division is not altogether clear-cut. For instance, the instrumental, traditionally regarded as a case category, may combine with infinitivals in Warlpiri as well as with basic nominals. Moreover, there is a great deal of apparent syncretism between cases and complementizers, so that an element whose function falls clearly within the range of traditional case categories may have a phonologically identical partner fulfilling a distinct, though often semantically related, complementizer function. The phonological syncretism of the dative case and the purposive/jussive complementizer (see sec. 2.3), for example, is observed not only in Warlpiri but in languages widely distributed throughout Australia, and it has been the focus of considerable interest in the literature (cf. Dixon 1976).

I have mentioned one readily observable distinction between grammatical cases and the more heterogeneous set consisting of the semantic cases and complementizers, namely the difference that the former, but not the latter, are construed with person markers in the auxiliary. There is another important distinction, although it does not serve as an entirely consistent criterion for classification. With the obvious exception of the adjunct dative, grammatical cases are by and large obligatory components of the case arrays selected by individual verbs, corresponding to the argument positions inherent to verbal lexical items. The grammatical cases 'have meaning' only to the extent that they are linked to argument positions of verbs. Semantic cases and complementizers are quite different in this regard. They are rarely obligatory in the case arrays of verbs, and they have meanings which are independent of the argument structures of verbs. A part of the task of the ensuing subsections will consist in characterizing the meanings of semantic cases and complementizers, as well as in identifying certain formal properties which they exhibit. I will begin with the four spatial cases of Warlpiri.

2.1 THE SPATIAL CASES

In discussing the meanings of the Warlpiri spatial cases, I will use the term 'place' to refer to the entity denoted by the nominal to which a spatial case ending is attached. Thus in the following sentences the nominal /pirli/ 'stone' represents the 'place':

(64) (a) Karli ka pirli-ngka nguna-mi.

boomerang PRES stone-LOC lie-NPST

'The boomerang is lying on the stone.'

(b) Ngarrka-ngku ka karli pirli-ngka yirra-rni.

man-ERG PRES boomerang stone-LOC put-NPST

'The man is putting the boomerang on the stone.'

The notion 'place' is not a term of grammar but rather a term which designates one of the components in a spatial relationship, i.e. a 'locality' with respect to which some other entity may be oriented in spatial terms. I will use the term 'figure' to refer to an entity — represented by an argument of the predicate — whose location or path of movement, as the case may be, is related in spatial terms to the 'place'. In the sentences of (64) above, the nominal /karli/ 'boomerang' represents the figure. In (64a), the location of the figure may be said to 'coincide' with the place; and in (64b), the agent, represented by the subject, is bringing about the circumstance in which the location of the figure will coincide with the place. In (65) below the same nominals represent the figure and the place, but in this instance the spatial relation expressed by the case ending is that in which the place constitutes the 'starting-point' of the path followed by the figure in its downward movement:

(65) Karli ka pirli-ngirli wanti-mi.

boomerang PRES stone-EL fall-NPST

'The boomerang is falling from the stone.'

The spatial cases of Warlpiri are tabulated in (66) below:

(66)	-ngka ∿ -rla	'locative' (LOC)
	-wana	'perlative' (PERL)
	-kurra	'allative' (ALL)
	-ngurlu	'elative' (EL)

The alternation in the locative ending is governed by the same principle as that which operates in the ergative — thus the velar-initial ending occurs with disyllabics, the lateral-initial with bases which are trisyllabic or longer. The /u/- vowels of the allative and elative endings are subject to the general rule of assimilation observed earlier in connection with the ergative and dative — hence the vocalism in the elative of (65) above.

The semantic dimension of 'coincidence' serves to partition the system of spatial cases into two opposed sets. The locative and perlative share the property that they express a coincidence, subject to physical limitations, of the place with the location of the figure. The allative and elative, on the other hand, express a different sort of relation, namely an association of the place with one or the other terminus of a path or linear extension along which the figure moves or is arranged. The allative associates the place with the end-point, while the elative associates the place with the starting-point. The semantic dimensions involved in the spatial cases can be brought out vividly through a comparison of minimally distinct sentences as, for example, the following:

(67) (a) Waya ka pirli-ngka nguna-mi.
wire PRES stone-LOC lie-NPST
'The wire is lying on the stone.'

(b) Waya ka pirli-wana nguna-mi.
wire PRES stone-PERL lie-NPST
'The wire is lying along the stone.'

(c) Waya ka pirli-kirra nguna-mi.
wire PRES stone-ALL lie-NPST
'The wire extends to the stone.'

(d) Waya ka pirli-ngirli nguna-mi.
wire PRES stone-EL lie-NPST
'The wire extends from the stone.'

In (67a) and (67b) the location of the wire coincides with the stone; that is to say, the stone *is the place* where the wire is located. The difference between the locative and the perlative consists in the dimension of linearity. The perlative stipulates that the figure, in this case the wire, is arranged along a linear extension coinciding with the stone. In the most natural interpretation, the wire is stretched out, forming a line from one end of the stone to the other. A telephone line running along a hill would be perfectly described by (67b); the noun /pirli/ includes 'hill' in its semantic range. It should be pointed out that the linearity stipulated by the perlative is not inconsistent with the meaning of the locative; the locative simply expresses the coincidence of figure-location and place, without reference to the arrangement of the figure. Thus the situation described in (67b) is included in the more general range of situations covered by (67a).

The situations described in (67c-d) do not involve a coincidence of figure-location and place. It is nonetheless correct to speak of a 'coincidence' in these cases, but it is the coincidence of a terminus with the place. Depending upon the actual situation, the linear extension along which the wire is arranged may be said either to begin or to end at the stone. If it is the starting-point which coincides with the stone *(terminus a quo)*, then the elative expression is appropriate; if the end-point coincides with the stone *(terminus ad quem)*, then the allative is the appropriate expression.

The sentences of (67) involve a stance verb. All of the spatial cases may also co-occur very naturally with verbs of motion, in which case the location of the figure is understood as being the path along which the figure moves. In the following sentences, the nominal /nantuwu/ 'horse' represents the figure and the nominal /karru/ 'creek, creekbed' represents the place:

(68) (a) Nantuwu ka karru-ngka parnka-mi.
horse PRES creek-LOC run-NPST
'The horse is running in the creek.'

(b) Nantuwu ka karru-wana parnka-mi.
horse PRES creek-PERL run-NPST
'The horse is running along the creek.'

(c) Nantuwu ka karru-kurra parnka-mi.
horse PRES creek-ALL run-NPST
'The horse is running to the creek.'

(d) Nantuwu ka karru-ngurlu parnka-mi.

horse PRES creek-EL run-NPST

'The horse is running from the creek.'

In both of (68a-b), the path along which the horse moves coincides with the creek, but in (68b) it is understood to coincide with the linear arrangement of the creek as well. In (68c) and (68d), the creek constitutes the end-point and starting-point, respectively, of the horse's path of movement.

The notion 'coincidence' is central to the meanings of the Warlpiri spatial cases, particularly where it is claimed, as it is for the locative and perlative, that the meaning involves a coincidence of place and figure-location. The precise nature of the coincidence depends upon the natures of the figure and place. Although the perlative attributes linear extension to the figure, the locative merely expresses coincidence, no more. The locative is thus extremely general, permitting all possible realizations of coincidence. Thus, for example, if the place is characterized primarily by inner space and therefore the ability to contain, the relationship expressed by the locative is, in the most natural usage, that according to which the figure is located within the place, provided of course that the nature of the figure permits this interpretation, as it does in the following:

(69) (a) Ngapa ka kartaku-rla karri-mi.

water PRES billycan-LOC stand-NPST

'Water is standing in the billycan.'

(b) Lungkarda ka ngulya-ngka nguna-mi.

bluetongue PRES burrow-LOC lie-NPST

'The bluetongue skink is lying within the burrow.'

But if the foremost characteristic of the place is, say, its upper surface, then the locative would most likely be used to express location of the figure upon that upper surface, as in

(70) (a) Maliki ka walya-ngka nyina-mi.

dog PRES ground-LOC sit-NPST

'The dog is sitting on the ground.'

(b) Kurdu ka pangkarra-rla nguna-mi.

child PRES blanket-LOC lie-NPST

'The child is lying on the blanket.'

And so on. Moreover, if the place constitutes a discrete entity located within a larger ground, it can be understood to designate a point coinciding with the location of the figure, within the limits of physical possibilities, of course. In this instance the locative is appropriate for describing adjacency of the figure to the place, as in

(71) (a) Ngarrka ka warlu-ngka nyina-mi.
man PRES fire-LOC sit-NPST
'The man is sitting at the fire.'

(b) Ngalipa kapi-rlipa ngapa-ngka nguna-mi.
we FUT-122 water-LOC lie-NPST
'We (plural inclusive) will camp (lit. lie) at the water.'

If the place combines a variety of characteristics (e.g. an upper surface and inner capacity) and is, in addition, appropriately viewed as a discrete point in space, then the locative is correspondingly polysemous. Thus, for example, the sentences of (71) above are readily open to alternative interpretations, as is (72) below:

(72) Kurdu ka yuwarli-rla karri-mi.
child PRES house-LOC stand-NPST
'The child is standing in/on/at the house.'

This polysemy is entirely consistent with the semantic characterization of the locative as merely expressing a coincidence of place and figure-location. The polysemy resides not in the locative itself but rather in the nature of the figure and place.

There exist in Warlpiri various means by which the spatial relations expressed by the locative can be more narrowly specified. The meaning of the verb, for example, might narrow the range of possibilities. Thus, for example, the verb of (71b) above permits a wide range of interpretations for the locative expression. But if the same verbal base is combined with the preverb /julyurl-/ 'in water, in fire', giving the complex theme /julyurl-nguna-mi/ 'ABS lie in water, in fire', the locative expression /ngapa-ngka/ is correspondingly narrowed to depict the situation in which the figure is located in, rather than besides, the water:

(73) Kurdu ka ngapa-ngka julyurl-nguna-mi.
child PRES water-LOC julyurl-lie-NPST
'The child is lying in the water.'

But the most productive device for specifying precise locative relationships consists in the complex locative construction, in which a locative expression combines with a member of a semantically coherent subset of nominals possessing inherent space-relational meanings. The following sentences exemplify the complex locative constructions:

(74) (a) Kurdu ka yuwarli-rla kankarlarni karri-mi.
child PRES house-LOC upon stand-NPST
'The child is standing on top of the house.'

(b) Ngarrka ka yuwarli-rla kaninjarni nyina-mi
man PRES house-LOC within sit-NPST
'The man is sitting inside the house.'

(c) Karnta ka nyina-mi warlu-ngka kutu.
woman PRES sit-NPST fire-LOC near
'The woman is sitting near the fire.'

(d) Maliki ka nguna-mi yuwarli-jarra-rla kulkurru(jarra).
dog PRES lie-NPST house-DUAL-LOC between
'The dog is lying between the two houses.'

Here the locative expresses coincidence of place and figure-location, while the space-relational nominal functions to specify the particular realization of the coincidence. The meaning of the space relational may be such that it is not, strictly speaking, consistent with what I have asserted to be the core meaning of the locative, i.e. the coincidence of place and figure-location. In fact, the highly structured subset of space relationals referring to the cardinal directions (see the excellent detailed account given in Laughren 1978) formally recognizes an opposition which, in complex locatives, distinguishes coincidence from non-coincidence. I will use the terms centripetal and centrifugal to designate the polar values of this opposition. The former are marked by means of the ending /-rni/ (seen, in fact, in the space relationals of 74a-b above), while the latter are marked by means of the ending /-rra/. (These endings also occur as a part of the system of verbal space-relational suffixes, see Nash 1980.) The centripetal forms are often extended by means of the special locative ending /-nginti/ which is limited in its combinatorial possibilities to the space relationals. The opposition is exemplified in the following:

(75) (a) Nantuwu ka karri-mi pirli-ngka yatija-rni-nginti.
horse PRES stand-NPST hill-LOC north-CENTRIPET-nginti
'The horse is standing on the north side of the hill.'

(b) Nantuwu ka karri-mi pirli-ngka yatija-rra.

horse PRES stand-NPST hill-LOC north-CENTRIFUG

'The horse is standing north of *(or* north from) the hill.'

The centripetal space relational in (75a) is not in conflict with the coincidence aspect of the locative meaning; in fact, it reinforces it. The centrifugal space relational of (75b), however, attenuates the coincidence meaning of the locative. In combinations of this latter sort, the force of the locative is simply to express the fact that there is a spatial relationship (but not one of coincidence) holding between the place and the location of the figure. Some space relational forms so severely contradict the core meaning of the locative that the use of that case in forming complex locatives with them is strongly disfavored. This is true, for instance, of the space relational /wurnturu/ 'far'; although the locative is possible with it, the elative is preferred, thereby embodying in the case ending itself the spatial separation of the figure from the place. Thus,

(76) Ngaju ka-rna nyina-mi wurnturu Yurntumu-ngurlu.

I PRES-1 sit-NPST far Yuendumu-EL

'I live (lit. sit, am in position) far from Yuendumu.'

It is also possible to use the ending /-ku/ on the place nominal, instead of the locative, to form complex locative expressions of this type. This ending is identical in form to the dative, though it is not construed with the auxiliary as the grammatical case would be.

The spatial cases of Warlpiri co-occur abundantly with verbs of stance and motion, verbs whose meanings involve spatial relationships in essential ways. In intransitive stance and motion sentences, like those exemplified so far, it is of course the subject which corresponds to the entity depicted as being in some location or as being in motion; and it is, therefore, the subject which represents the figure in the situations described by the intransitive sentences. In transitive stance and motion sentences, on the other hand, the object represents an entity located, held, or moved, and it is therefore the object which represents the figure. It follows, then, that the absolutive argument will represent the figure in stance and motion sentences, both transitive and intransitive. This is amply exemplified for intransitives in the foregoing discussion, and it is exemplified for the transitive by (64b) above. The transitive situation is further exemplified by the following sentences:

(77) (a) Karnta-ngku ka kurdu parraja-rla marda-rni.

woman-ERG PRES child coolamon-LOC hold-NPST

'The woman is holding the baby in the coolamon.'

(b) Ngarrka-ngku ka kuyu yakuju-kurra yirrpi-rni.
man-ERG PRES meat bag-ALL insert-NPST
'The man is putting the meat into the bag.'

(c) Purlka-ngku ka maliki yilya-mi ngurra-ngurlu.
oldman-ERG PRES dog send-NPST camp-EL
'The old man is sending (i.e. shooing) the dog from camp.'

(d) Pirli ka-lu-jana yurutu-wana yirra-rni.
stone PRES-333-333 road-PERL put-NPST
'They are placing stones along the road.'

In each of these sentences, the object — i.e. the absolutive argument — represents the figure. The figure is related to the place in accordance with the meaning expressed by the spatial case ending. Thus in (77a) the location of the baby coincides with the coolamon — a shallow, elongated, wooden carrying dish — and the natural interpretation of the coincidence is that according to which the baby is lying within the convex surface of the implement. In (77b), the verb depicts an action in which an agent (represented by the ergative subject) moves some entity (the absolutive object) along a path which terminates at some point internal to another entity. In this instance, the meat is moved along a path whose end-point coincides with the interior of the bag (that it is the interior, rather than, say, the outer surface of the bag, is deducible from the meaning of the verb). In (77c), the verb depicts an action in which an agent, in one way or another, causes some entity to move along a linear trajectory; no terminus is implied by the verb itself, but one may be specified by means of a spatial case; in this instance, the elative stipulates that the path followed by the dog begins at the camp. In (77d) the agent moves the stones into a location coinciding with the road. The perlative stipulates that this location has linear extension, so the natural interpretation is that the stones are arranged in a linear array coinciding with the linear arrangement of the road.

It is important to bear in mind that the use of the spatial cases with stance and motion verbs is not limited by arbitrary lexical properties of the verbs. It does not make sense to classify the verbs in terms of the spatial cases they select. Since the spatial cases are themselves meaningful, it is sufficient to know the meaning of a verb to determine whether or not it will be compatible with a particular spatial case expression. On the other hand, the spatial cases can often be used to test for the meaning of a verb. Thus, for example, while the verbs /wapa-mi/ and /ya-ni/ both refer to motion characteristic of the species represented by their subjects — e.g. walking of a legged creature, flying of a bird, swimming of a fish or water fowl, etc. — they do not co-occur indiscriminately with the spatial cases. Rather, /wapa-mi/ more readily appears with the locative than with the other cases, while the reverse is true of /ya-ni/. This follows from the fact that /wapa-mi/ depicts motion without linear direction, e.g. 'walking around, wandering about'. Like the basic stance verbs, the motion verb /wapa-mi/ denotes a 'manner of being' characteristic of certain entities, in this case entities which can propel themselves. Thus it is often used in assertions whose purpose is merely to describe the typical location of an entity which characteristically moves about, as in

(78) (a) Jurlpu ka-lu kankarlu wapa-mi.

bird PRES-333 above move-NPST

'Birds live in the air (lit. up above).'

(b) Jipilyaku ka-lu ngapa-ngka wapa-mi.

duck PRES-333 water-LOC move-NPST

'Ducks live in/on the water.'

(c) Wakulyarri ka-lu pirli-ngka wapa-mi.

wallaby PRES-333 hill-LOC move-NPST

'Rock wallabies live in the hills.'

In this quite normal usage, /wapa-mi/ is little different from the stance verb /nyina-mi/ 'ABS sit, be', which likewise figures prominently in discussions of the habitats of animals. By contrast, the verb /ya-ni/ is seldom used in this way. Rather, it refers to motion with linear direction and therefore readily accepts an allative or an elative complement, designating a terminus of the path of motion. To be sure, it is also compatible with the locative. But with /ya-ni/, the locative either expresses the coincidence of the path of motion with the place — i.e. the path is within the area corresponding to the place (cf. 68a above) — or else the locative expresses the normal coincidence of figure-location and place; but the place is a vehicle which is itself in linear motion, as in

(79) Japanangka ka ya-ni-rni tiraki-rla.

japanangka PRES go-NPST-HITHER truck-LOC

'Japanangka is coming in the truck.'

In the sentences examined so far, the figure corresponds to the absolutive argument of the verb with which the spatial case expression is used. This is the normal situation with verbs of stance, motion, physical transfer, holding, and the like, which depict events in which an entity occupies a position in space or undergoes motion. But it is not always the case that the figure corresponds to the absolutive, nor is it true to say that the use of Warlpiri spatial cases is limited to stance and motion sentences of the type so far exemplified.

Certain verbs of physical transfer entail that the agent, as well as the patient or theme, is in motion. This is true, for example, of the verb /ka-nyi/ 'ERG carry ABS' and certain verbal themes built upon it, e.g. /jarna-ka-nyi/ 'ERG carry ABS (as slain animal) on the shoulders' and /rdanjarr-ka-nyi/ 'ERG carry a full load of ABS'. Such a verb is different in this respect from, say, /yirra-rni/ 'ERG put ABS, ERG place ABS' or /yirrpi-rni/ 'ERG insert ABS' which entails only that the patient undergoes motion. In a sentence like (80) below, both the agent and the patient — represented by the ergative subject and the absolutive object respectively — undergo motion along a path whose end-point coincides with the place; thus, properly speaking, both the agent and the patient are 'figures' with respect to the spatial case expression:

(81) Ngarrka-ngku ka kuyu ka-nyi ngurra-kurra.

man-ERG PRES meat carry-NPST camp-ALL

'The man is carrying the meat to the camp.'

It is possible, in Warlpiri, to focus upon the fact that the agent bears the figure relation to the place by inflecting the spatial case expression to agree with the ergative subject. Thus an alternative to (81) is the following:

(82) Ngarrka-ngku ka kuyu ka-nyi ngurra-kurra-rlu.

man-ERG PRES meat carry-NPST camp-ALL-ERG

This results in 'double case marking', in which a semantic case suffix is immediately followed by a grammatical case suffix.

A closely similar situation can be observed in relation to the verb /wajili-pi-nyi/ 'ERG chase ABS' and its synonym /purrjurl-pi-nyi/. Chasing, at least in the sense of these Warlpiri verbs, entails motion on the part of the agent. In fact, the meaning of these verbs is approximately 'agent causes patient to run by running behind patient'. However, it is not necessary, in truthfully using these verbs, that the agent run the same distance as the patient; the agent can run less. Thus, in (83) below, the child does not necessarily arrive at the camp (though it is understood that the dog does, if the action is successfully completed):

(83) Kurdu-ngku ka maliki ngurra-kurra wajili-pi-nyi.

child-ERG PRES dog camp-ALL running-verb-NPST

'The child is chasing the dog to camp.'

It is, however, possible to employ double case marking here — inflecting the allative expression to agree with the ergative subject — but so doing adds to the propositional content of the sentence by explicitly stipulating that the child arrives at the camp. Thus the following sentence is more informative than is the nearly synonymous (83) above:

(84) Kurdu-ngku ka maliki ngurra-kurra-rlu wajili-pi-nyi.

child-ERG PRES dog camp-ALL-ERG running-verb-NPST

'The child is chasing the dog (all the way) to camp.'

Here it is proper to say that the agent (as well as the patient) bears the figure relation to the place represented by the nominal in the allative case expression. The distinction between (83) and (84) is brought out clearly in an excellent bilingual (Warlpiri-English) essay in Granites 1976.

The verb /yilya-mi/ 'ERG send ABS', like the verb of (83) and (84) above, depicts an action in which an agent induces motion in a patient. But in this case, it is not entailed that the agent is also in motion. Thus the normal interpretation of (85) below is that in which only the dog goes to the camp:

(85) Ngarrka-ngku ka maliki ngurra-kurra yilya-mi.

man-ERG PRES dog camp-ALL send-NPST

'The man is sending the dog to the camp.'

If the allative expression were inflected to agree with the ergative subject here, the meaning would be quite different. The allative would be predicated of the subject (cf. Hale 1979, Nash 1980), and the sentence would imply no relation whatsoever between the dog and the camp. Thus,

(86) Ngarrka-ngku ka maliki yilya-mi ngurra-kurra-rlu.

man-ERG PRES dog send-NPST camp-ALL-ERG

'The man, on his way to camp, is sending (e.g. shooing away) the dog.'

The spatial case expression here serves to supply additional information, quite independent of the content of the verb itself, regarding the agent. It corresponds, in effect, to a subordinate proposition, incidental to that depicted by the verb itself but involving one of the arguments of the latter.

The predicational use of spatial cases is common in Warlpiri, constituting one of a variety of mechanisms for incorporating subordinate propositions into sentences. Predication is signaled by case agreement, giving rise to a full range of 'double case markings' in which a spatial case is extended by one of the grammatical cases. In this predicational usage, the absence of an overt grammatical case is often used precisely to indicate that the spatial case expression is predicated of the absolutive (i.e. the unmarked) argument. Further examples of this predicational usage are given in (87) below:

(87) (a) Ngarrka-ngku ka yankirri luwa-rni ngapa-ngka-rlu.

man-ERG PRES emu shoot-NPST water-LOC-ERG

'The man is shooting the emu at the water hole.'

(b) Ngarrka-ngku ka-rla-jinta yankirri-ki luwa-rni ngapa-ngka-ku.

man-ERG PRES-rla-jinta emu-DAT shoot-NPST water-LOC-DAT

'The man is shooting at the emu at the water hole.'

(c) Karnta-ngku ka-rla kurdu-ku miyi yi-nyi parraja-rla-ku.

woman-ERG PRES-rla child-DAT food give-NPST coolamon-LOC-DAT

'The woman is giving the baby, which is in the coolamon, food.'

(d) Karnta-ngku ka-rla kurdu-ku miyi yi-nyi parraja-rla.

woman-ERG PRES-rla child-DAT food give-NPST coolamon-LOC

'The woman is giving the child food in the coolamon.'

(e) Ngalipa-rlu kapi-rlipa kuyu paka-rninja-ya-ni yurutu-wana-rlu.

we-ERG FUT-122 meat strike-INF-go-NPST road-PERL-ERG

'We (pl. incl.) will kill meat (on our way) along the road.'

In (87a) the man is necessarily at the water hole. If the locative case expression were unmarked, the sentence would not stipulate that the man is at the water hole; it would be neutral in this regard. In (87b) the locative is marked dative in agreement with the dative object; while this stipulates that the emu is at the water hole, the man may or may not be. In (87c) the locative is predicated of the indirect object, hence the baby is in the coolamon; but in (87d) the locative is predicated of the direct object — both are unmarked, hence absolutive — and it is understood that the food is in the coolamon. In (87e), finally, the perlative expression is predicated of the subject, indicating the location, or path of movement, of the individuals engaged in the action depicted.

For some speakers of Warlpiri, the elative may also be marked to agree with an ergative subject. One such usage is analogous to (86) above:

(88) Kurdu-ngku ka maliki ngurra-ngurlu-rlu wajili-pi-nyi.

child-ERG PRES dog camp-EL-ERG running-verb-NPST

'The child is chasing the dog (all the way) out of camp.'

But there is, in addition, a use of the elative in apposition to an ergative subject to indicate the static location of an entity engaged in an activity or process which can be viewed as having its 'point of origin' in that entity, the latter being represented by the ergative subject. This usage is quite straightforward in sentences involving a verb like /kiji-rni/ 'ERG throw ABS ...', as in

(89) (a) Kilyawu-rlu ka walya kiji-rni-rni ngulya-ngurlu-rlu.

lizard-ERG PRES dirt throw-NPST-HITHER burrow-EL-ERG

'The lizard (sp., defenceless dragon) is throwing dirt out from the burrow (the lizard is in the burrow).

(b) Wirriya-rlu ka kiji-rni watiya pirli-ngirli-rli.

boy-ERG PRES throw-NPST stick hill-EL-ERG

'The boy is throwing a stick from the hill (the boy is on the hill).'

Interestingly, this usage is also observed with the perception verb /nya-nyi/ 'ERG see ABS, ERG look at ABS':

(90) Purlka-ngku ka marlu nya-nyi-rni ngurra-ngurlu-rlu.

oldman-ERG PRES kangaroo see-NPST-HITHER camp-EL-ERG

'The old man, in camp, is looking this way at the kangaroo.'

The appearance of an allative, elative or perlative expression in apposition to a dative argument is not particularly frequent in observed speech, but it is possible, as the following examples attest:

(91) (a) Ngaju ka-rna-rla kurdu-ku mari-jarri-mi ngurra-kurra-ku.

I PRES-1-rla child-DAT sorry-INCH-NPST camp-ALL-DAT

'I feel sorry for the child (who is on its way) to camp.'

(b) Purlka-ngku ka-rla yapa-ku miyi marda-rni ngurra-ngurlu-ku.[4]
oldman-ERG PRES-rla person-DAT food hold-NPST camp-EL-DAT
'The old man is holding the food for the person (who is on his way) from camp.'

(c) Ngarrka ka-rla marlu-ku jaarl-parnka-mi yuwurrku-wana-ku.
man PRES-rla kangaroo-DAT blocking-run-NPST scrub-PERL-DAT
'The man is running to intercept the kangaroo (that is going) through the scrub.'

The phenomenon of double case marking constitutes an additional feature distinguishing certain of the semantic cases (particularly the spatial cases) from the grammatical cases. A semantic case expression may be further marked by means of a grammatical case ending to indicate apposition to a principal argument of the verb; a grammatical case, by contrast, may not be further marked by any case category. Certain complementizers share this double case marking capability with the semantic cases (see sec. 2.4 below).

An additional remark should be made at this point concerning the locative case. In the examples cited to this point, the place nominal (i.e. the nominal inflected for locative) designates the location of an entity represented by one or another of the grammatical case arguments. There is another use of the locative as well, namely to designate the location of an event or condition. This is the normal interpretation of the locative in such sentences as the following:

(92) (a) Ngapa ka wanti-mi Yurntumu-rla.
water PRES fall-NPST Yuendumu-LOC
'It is raining at Yuendumu.'

(b) Yuwarli ka-lu-jana panu nganti-rni Yurntumu-rla.
house PRES-333-333 many build-NPST Yuendumu-LOC
'They are building lots of houses at Yuendumu.'

When, in a transitive sentence, the locative is inflected to agree with the ergative subject, it is understood that the locative has scope over the entire activity denoted by the verb. Thus in a sentence like (87a) above, the object, as well as the subject, is normally understood to be located at the place indicated by the locative expression. It may not, therefore, be entirely correct to say that the locative in such cases is strictly speaking in apposition to the subject; rather, this may be another instance in which the locative designates the location of the event — i.e. it is, so to speak, predicated of the event depicted by the matrix predication as a whole rather than of just one of the arguments. The issue is by no means clear, however.

A natural extension of the use of the locative to designate the spatial location of an event, as in (92) above, is its use to designate the temporal location of an event or condition, as in

(93) (a) Ngapa ka wanti-mi wajirrkinyi-rla.

water PRES fall-NPST greentime-LOC

'Rain falls during the "green" season.'

(b) Kula-ka-rna warrki-jarri-mi yulyurrpu-rla.

NEG-PRES-1 work-INCH-NPST coldtime-LOC

'I don't work in the winter.'

(c) Kula-ka-rna munga-ngka warrki-jarri-mi, lawa;
parra-ngka-mipa ka-rna warrki-jarri-mi.

NEG-PRES-1 night-LOC work-INCH-NPST, negative;
daytime-LOC-ONLY PRES-1 work-INCH-NPST

'I don't work at night, I don't; I only work during the day.'

(d) Kardiya-wangu-rla-wiyi kala-lu yapa-ngku kuyu
kurlarda-rlu pantu-rnu.

European-PRIVATIVE-LOC-BEFORE USIT-333 person-ERG
meat spear-INSTRUMENTAL spear-PST

'Before the Europeans came (lit. before, in the absence of Europeans), people used to spear meat with spears.'

(e) Ngapa-wangu-rla, kajika-rli jukurra wirlinyi ya-ni.

water-PRIVATIVE-LOC, POTEN-12 tomorrow hunting go-NPST

'If it doesn't rain (lit. in the absence of rain), we (dual inclusive) could go hunting tomorrow.'

Time and circumstance are often united in Warlpiri usage, hence the conditional reading associated with (93e) above.

The uses of the spatial cases so far discussed might, with some justice, be termed the 'concrete' uses of them, in the sense that the nominal element with which they combine corresponds to the spatial notion 'place' (with an extension to 'time' in the case of the locative, to be sure). There are, however, special uses of these case categories which depart from the strictly spatial domain. In these special uses the nominal with which they combine does not correspond to the notion 'place', nor is there a single semantic notion which can be uniformly associated with it — although it is usually possible to imagine a connection between the special and the concrete sense in each instance. In the remainder of this subsection, I will discuss these special uses, case by case, and I will introduce certain more marginal semantic cases which are related in one way or another to the four basic spatial cases.

Certain verbs must be said to 'select' the locative case as a part of their basic argument structure. Thus, for example, the verb /manyu-karri-mi/ (play-stand-NPST), used in the sense 'to play a game', selects the locative case on the nominal designating the game. Thus,

(94) Ngarrka-patu ka-lu karti-ngka manyu-karri-mi karru-ngka.

man-PL PRES-333 cards-LOC play-stand-PRES creek-LOC

'The men are playing cards in the creekbed.'

Notice that the selected locative /karti-ngka/ (cards-LOC) co-occurs here with another locative /karru-ngka/ (creek-LOC) bearing the concrete spatial meaning. The number of Warlpiri verbs which select the locative in this way is, so far as I am aware, rather small. Although the locative in this usage is selected, and therefore like a grammatical case, it is not construed with the auxiliary, and in this respect it behaves like an ordinary semantic case.

Closely related to the locative, both in meaning and in form, is the comitative, used to indicate that the location or path of some individual represented by a principal argument of the verb — e.g. the subject, as in (95) below — coincides with the location or path of another individual, represented by the nominal of the comitative expression:

(95) (a) Kurdu ka karnta-ngkajinta nyina-mi.

child PRES woman-COMIT sit-NPST

'The child is sitting with the woman.'

(b) Maliki ka nantuwu-rlajinta parnka-mi.

dog PRES horse-COMIT run-NPST

'The dog is running along with the horse.'

(c) Kurdu-ngku ka ngurlu kipi-rni karnta-ngkajinta-rlu.

child-ERG PRES mulgaseed winnow-NPST woman-COMIT-ERG

'The child, with the woman, is winnowing mulga seed.'

The comitative ending consists of two parts, the first of which is identical to the locative — i.e. the alternants /-ngka ∿ -rla/ selected in accordance with the same principle that governs the ergative and simple locative alternations. The second portion is the element /-jinta/, perhaps related etymologically to the nominal element /jinta/, which functions as a singular indefinite determiner (often translated 'one') and as a predicate expressing either singularity ('one') or identity (often translated 'the same').

It is perhaps not surprising, in view of its meaning, that the perlative also has a comitative use, as in

(96) Ngaju kapi-rna wirlinyi ya-ni japangardi-wana.

I FUT-1 hunting go-NPST japangardi-PERL

'I will go hunting with Japangardi.'

Here the path or itinerary followed by Japangardi coincides with that of the individual denoted by the subject.

It should, of course, be borne in mind that the category 'comitative' entails more than mere coincidence of location or path, though this is surely relevant to explaining why the locative and perlative cases are implicated. The comitative asserts in addition that the individuals involved are engaged in the same activity at the same time.

An ending consisting, evidently, of a reduplication of the perlative — i.e. /-wanawana/ — combines with nominals to designate an item exchanged for another in trade or purchase, as in

(97) Japanangka-rlu ka-ju karli yi-nyi miyi-wanawana.

japanangka-ERG PRES-1 boomerang give-NPST food-EXCH

'Japanangka is giving me a boomerang in exchange for food.'

The elative ending /-ngurlu/ has an important use in Warlpiri which departs radically from the concrete spatial sense but, at the same time, is related to the latter by means of a metaphorical association which is not at all unfamiliar, namely the association of 'source' or 'origin' with 'reason' or 'motive'. In (98) below, the elative expression designates the reason behind the action described:

(98) Maliki-jarra-rlu ka-pala-nyanu kulu-ngku yarlki-rni kuyu-ngurlu.

dog-DUAL-ERG PRES-22-r anger-INST bite-NPST meat-EL

'The (two) dogs are fighting (lit. biting each other in anger) over the meat.'

For many speakers of Warlpiri, the favored form of the elative is /-jangka/ rather than /-ngurlu/. And in the speech of all Warlpiris, so far as I am aware, the ending /-jangka/ exists with a temporal, or mixed temporal-causal, sense corresponding to certain uses of English 'after' and 'from', as in

(99) (a) Ngarrka-patu ka-lu warrki-jangka mata nguna-mi-lki.
man-PL PRES-333 work-EL tired lie-NPST-NOW
'The men are lying down tired now after/from work.'

(b) Jurru ka-rna rapa-jarri-mi yakajirri-jangka.
head PRES-1 ache-INCH-NPST Solanum-EL
'I have a (pounding) headache after/from (eating) desert raisin (Solanum ellipticum).'

(c) Karnta-ngku ka-ju ngapa yi-nyi wirlinyi-jangka-ku.
woman-ERG PRES-1 water give-NPST hunting-EL-DAT
'The woman is giving me water after (I have been) hunting.'

The nominal combining with /-jangka/ corresponds to an event which is temporally prior to the event or condition described by the verb. Often, the prior event is only alluded to in the most indirect way by the nominal in the elative expression — as in (99b) above, for example. But these elatives may also be used in concert with infinitivals in /-warnu/ to elaborate more amply as to the nature of the prior event. Thus, for example,

(100) (a) Jurru ka-rna rapa-jarri-mi yakajirri-jangka nga-rninja-warnu.
head PRES-1 ache-INCH-NPST Solanum-EL eat-INF-warnu
'I have a headache from eating desert raisin.'

(b) Kurdu ka nyurnu nguna-mi warna-jangka yarlki-rninja-warnu.
child PRES sick lie-NPST snake-EL bite-INF-warnu
'The child is lying sick from being bitten by a snake.'

(c) Ngaju ka-rna mata-jarri-mi warlu-jangka paka-rninja-warnu.
I PRES-1 tired-INCH-NPST firewood-EL chop-INF-warnu
'I am getting tired from chopping wood.'

This second elative is also used to designate the material source of an item manufactured, as in

(101) Karli ka-lu manja-jangka ngurrju-ma-ni.

boomerang PRES-333 mulga-EL good-CAUS-NPST

'They make boomerangs out of mulga wood.'

Like the other spatial cases, the allative has also been observed in uses which depart from the strictly spatial sphere. Thus, for example, while the verb /wangka-mi/ 'ABS speak ...' normally selects the dative case on the nominal representing an individual to whom speech is directed (i.e. the addressee), it has also been recorded in spontaneous discourse, albeit only rarely, with an allative expression corresponding to addressee, as in the following exerpt:[5]

(102) ... nyampu-kurra-lku kuja-ka-rna wangka-mi walypali-kirra, ngula pina.

... this-ALL-NOW REL-PRES-1 speak-NPST whiteman-ALL, that knowing

'... (and) when I speak to this white man, it is with knowledge (that what I am saying is true).'

Notice that although the allative exactly paraphrases the dative here, it behaves properly like a semantic case in that it is not registered in the auxiliary.

This concludes my discussion of the spatial cases of Warlpiri. The locative, allative, and comitative have homophonous partners among the complementizers which will be discussed in the appropriate subsections below. I will not attempt to answer the question as to whether the homophony corresponds to a real relationship in the synchronic grammar of Warlpiri.

2.2 INSTRUMENTAL ADVERBS AND ADVERBS OF MANNER AND TIME

The instrumental case in Warlpiri is identical in phonological shape, and in its allomorphy, to the ergative. Moreover, it is limited in its occurrence to transitive sentences, in the narrow sense of section 1. That is to say, it may co-occur with a verb only if that verb belongs to the subcategory selecting the ergative case on its subject argument. Unlike the ergative, however, the instrumental is not construed with person markers in the auxiliary, nor does it behave in any other way like a true grammatical case. Examples of the instrumental (glossed INST) are presented in (103) below:

(103) (a) Yapa-ngku ka-lu kurdiji palya-ngku jarnti-rni.
people-ERG PRES-333 shield adze-INST trim-NPST
'People shape shields with the adze.'

(b) Wawirri kapi-rna kurlarda-rlu panti-rni ngajulu-rlu.
kangaroo FUT-1 spear-INST spear-NPST I-ERG
'I will spear the kangaroo with a spear.'

(c) Karli-ngki kala-lu yapa-ngku kuyu luwa-rnu.
boomerang-INST USIT-333 people-ERG meat hit-PST
'People used to kill (lit. pelt, hit with missile) meat with the boomerang.'

(d) Makiti-rli ka-rlipa luwa-rni kuyu ngalipa-rlu.
gun-INST PRES-122 shoot-NPST meat we-ERG
'We (plural inclusive) shoot meat with guns.'

In these examples, the nominal marked instrumental represents the instrument or tool by means of which the action depicted by the verb is carried out. And this is the primary function of the instrumental case in Warlpiri. It is understood always that the entity using the instrument or tool is that represented by the ergative subject. It follows naturally from its meaning that there will be a certain co-occurrence restriction on the instrumental. Specifically, it will be limited to co-occurrence with subjects which represent entities capable of using an instrument.

One might be tempted to argue that an inanimate subject, like that in (104) below, is in fact in the instrumental case rather than the ergative as I have implied heretofore:

(104) Marna-ngku-ju jinarn-kuju-rnu.
spinifex-ERG-1 trip-throw-PST
'The spinifex grass tripped me (causing me to fall).'

I think this would be a mistake, however. For one thing, the subject in (104) is not semantically an instrument but an agent, in the accepted sense of an entity causing the effect depicted by the verb. And for another thing, inanimate ergative subjects — unlike instrumentals — are construed with the auxiliary, as can be seen readily where the relevant nominal is nonsingular, and therefore overtly represented in the auxiliary by a subject person marker.

Thus,

(105) Kurlarda-jarra-rlu kalaka-pala kurdu yalumpu jinarn-kiji-rni.

spear-DUAL-INST ADMON-33 child that trip-throw-NPST

'The two spears are liable to trip that child (causing it to fall).'

But the very same nonsingular nominal, used in instrumental function, would yield its construal to the subject even where the latter, being third person singular, would not be overtly construed:

(106) Wirriya-rlu kalaka kurdu wita jinarn-kiji-rni kurlarda-jarra-rlu.

boy-ERG ADMON child little trip-throw-NPST spear-DUAL-INST

'The boy is liable to trip the small child with the two spears.'

Considering the meaning of the instrumental, it is perhaps surprising that it cannot co-occur with an intransitive verb. But this is a steadfast rule of Warlpiri grammar — the instrumental case is selected by transitive verbs only. (See Nash 1980 for a suggested explanation of this.) There is, to be sure, another method for expressing the instrumental relation. The proprietive suffix /-kurlu/ (together with its synonym /-parnta/) combines with nominals to form a proprietive, or possessive, expression which can be used either as main predicates or, like the locative, etc., predicated of one or another of the arguments of a verb, as in

(107) (a) Ngarrka ka ya-ni-rni kuyu-kurlu.

man PRES go-NPST-HITHER meat-PROP

'The man is coming with meat.'

(b) Kurdu ka-rla ngarrka-ku rdanpa-rni kuyu-kurlu-ku.

child PRES-rla man-DAT accompany-NPST meat-PROP-DAT

'The child is accompanying the man possessed of meat.'

The argument of which the proprietive is predicated represents the possessor of the entity denoted by the proprietive nominal; thus the man possesses the meat in (107a-b) above. The proprietive is readily extended in Warlpiri to indicate not only *possession* but also *use*, and where the use interpretation is appropriate it is often the foremost one. This instrumental function of the proprietive is available for intransitive and transitive sentences alike:

(108) (a) Purlka ka watiya-kurlu warru-wapa-mi.

oldman PRES stick-PROP around-walk-NPST

'The old man walks around with a stick.'

(b) Ngarrka-ngku ka warlu paka-rni warlkurru-kurlu-rlu.

man-ERG PRES firewood chop-NPST axe-PROP-ERG

'The man is chopping firewood with an axe.'

While (108b) could simply imply that the man possesses an axe, not that he is using it, such a sentence is normally interpreted in the same way as the following, in which the true instrumental is used:

(109) Ngarrka-ngku ka warlu paka-rni warlkurru-rlu.

man-ERG PRES firewood chop-NPST axe-INST

'The man is chopping firewood with an axe.'

There is no 'true instrumental' comparable to this for (108a) above, but it is possible for the proprietive there to receive the instrumental reading.

The instrumental combines with infinitival clauses as well as with pure nominals. Infinitival instrumentals consistently lack overt subjects, and it is understood that the subject of the infinitive is co-referential with the subject of the main clause. I will henceforth refer to this co-reference relationship by the terms 'construal' and 'control'. In this instance, the subject position in the argument structure of the infinitive verb is 'construed with' or 'controlled by' the subject of the main clause. The instrumental in this combination is used to indicate that the action depicted by the infinitive verb is the means or method by which the effect described by the main verb is brought about:

(110) (a) Ngarrka-ngku pirilyipirilyi pu-ngu kati-rninja-rlu.

man-ERG beetle kill-PST tread-INF-INST

'The man killed the beetle by stepping on it.'

(b) Parrulka ka-lu yapa-ngku kirlka-ma-ni pinkirrpa manu yumurru walji-rninja-rlu.

turkey PRES-333 people-ERG clean-CAUS-NPST feather and down pluck-INF-INST

'People clean wild turkeys by plucking out the feathers and down.'

Notice that the object, as well as the subject, is non-overt in the infinitival clause of (110a); it is understood that the object in the infinitival is co-referential with the object of the main verb.

The verbs /pina-ma-ni, pinapina-ma-ni, pinarri-ma-ni/ 'ERG teach ABS ...' select the instrumental case on a nominal or infinitival expression representing a subject matter transmitted by teaching. Thus,

(111) (a) Karntakarnta-rlu ka-lu-jana kurdukurdu jaru-ngku pinarri-ma-ni.

women-ERG PRES-333-333 children language-INST knowing-CAUS-NPST

'The women are teaching the children language.'

(b) Ngajulu-rlu kapi-rna kurdu nyampu pinapina-ma-ni karli kiji-rninja-rlu.

I-ERG FUT-1 child this knowing-CAUS-NPST boomerang throw-INF-INST

'I am going to teach this child how to throw the boomerang.'

It is not clear, to me at least, exactly how this last use of the instrumental is to be understood. It is possible that the infinitival instrumental expression /karli kiji-rninja-rlu/ designates an activity — performed by the individual represented by the subject of the main verb — which is used as a means of instruction. If this is true, then the proper translation of (111b) is 'I am going to teach the child by throwing the boomerang'. Here it would be correct to say that the subject of the infinitive is construed with the subject of the main clause. This usage might then differ in meaning from that in (112) below, where the infinitive is marked with the jussive ending /-ku/ (cf. sec. 2.3 below):

(112) Ngajulu-rlu kapi-rna kurdu nyampu pinapina-ma-ni karli kiji-rninja-ku.

I-ERG FUT-1 child this knowing-CAUS-NPST boomerang throw-INF-JUSS

'I am going to teach this child how to throw the boomerang.'

It is very likely that (111b) and (112) differ in the way in which the subject of the infinitive is construed — i.e. the main-clause subject controls in (111b), while the main-clause object controls in (112).

Manner adverbs, such as those listed in (113) below, have the property that they take an ending identical to the ergative and instrumental when they appear in transitive sentences:

(113)	muurlpa	'carefully, accurately'
	kilji	'fast, rapidly'
	yaruju	'quickly, in a hurry'
	kapanku	'quickly, in a hurry'
	pingka	'slowly, softly'
	wakurturdu	'strongly, loudly'
	pulya	'slowly, gently, softly'
	wurulypa	'secretly, out of sight or hearing'
	jaalypa	'at a whisper'
	kulu	'in anger'

The following sentences exemplify the use of a manner adverb:

(114) (a) Karnta ka muurlpa wangka-mi
woman PRES carefully speak-NPST
'The woman is speaking carefully, with precision.'

(b) Karnta-ngku ka kurdu muurlpa-rlu ka-nj-a-ni
woman-ERG PRES child carefully-ERG/INST carry-INF-go-NPST
'The woman is carrying the child along carefully.'

It is not possible at this time to say whether the ending appearing on the manner adverb in (114b) is to be identified with the ergative or with the instrumental, hence the equivocal glossing. One could argue, with some justice, that the ending is the ergative case, since it is paralleled by the absolutive in an intransitive sentence. It may be, for example, that the correct thing to say about manner adverbials is that they are in semantic apposition to the subject. This would account automatically for their case marking — absolutive in intransitives, ergative in transitives.

Time adverbials like

(115)	jalangu	'today, now'
	jukurra	'tomorrow, the next day'
	jukurrakari	'the day after tomorrow'
	pirrarni	'yesterday'
	yangkurra	'some days ago'
	yangkurrakari	'the day before yesterday'
	tarnnga	'always, eternally'
	wurra	'still, not yet'

may also bear the ERG/INST ending in transitive sentences, although this is not strictly adhered to as an obligatory practice as it apparently is in the case of the manner adverbs:

(116) (a) Jalangu-rna ya-nu-rnu ngaju.
today/now-1 go-PST-HITHER I
'I came today. I just now came.'

(b) Jalangu-rlu ka-lu-jana puluku turnu-ma-ni yapa-ngku.
today/now-ERG/INST PRES-333-333 bullock
assembled-CAUS-NPST people-ERG
'The people are mustering the cattle today.'

Here again, there is the possibility of viewing the time adverb as being predicated of the subject — hence absolutive in intransitives, ergative in transitives. And this would make sense in view of the theme of the unity of time and space which figures prominently in Warlpiri usage (cf. 93), i.e. an entity can be located in a time as well as in a place. The possibility of omitting the ergative ending from the time adverb in a transitive sentence would then correspond to the use of a locative expression in apposition to the absolutive object or to designate the location of the action as a whole. However, there is a flaw in the idea that time adverbs parallel, in this manner, the spatial expressions discussed at length in section 2.1. This consists in the observation that time adverbials never, so far as I am aware, inflect for dative case, as they would if they could be freely predicated of any of the grammatical arguments of the verb.

2.3 PURPOSIVE AND JUSSIVE EXPRESSIONS

The ending /-ku/, identical in form to the dative, has a broad range of uses as a complementizer in Warlpiri. It must be distinguished from the dative case, in that it is not construed with, or registered in, the auxiliary — although many of its functions are semantically reminiscent of certain of the semantic roles played by true dative arguments, and it is quite certain that there is at least an etymological relationship connecting the two. Be this as it may, the ending of concern in this subsection quite clearly belongs to the class of complementizers, insofar as that is a distinguishable category in Warlpiri. It readily combines with infinitivals, as well as with pure nominals, and it corresponds in its function to subordinating conjunctions which, in other languages (cf. English *for*), clearly belong to the complementizer category.

It is somewhat difficult to settle upon a uniformly appropriate label for the ku-complementizer. Its function as a marker of purpose clauses (e.g. 117a-b below) has led to the use of the term 'purposive' (PURP) in reference to it (cf. Dixon 1976), and its function as a subordinator on complements of command verbs (as in 117c-d below) is no doubt responsible for the occasional use of the term 'jussive' (JUSS) in reference to the ending. (Cf. Strehlow 1944, where its Arandic cognate is so labelled.) Examples follow forthwith:

(117) (a) Yapa ka-lu ya-ni-rni miyi ma-ninja-ku.

people PRES-333 go-NPST-HITHER food get-INF-PURP

'The people are coming in order to get food.'

(b) Ngarrka-jarra-rlu ka-pala parlku pangi-rni marlu purra-nja-ku.

man-DUAL-ERG PRES-33 trench dig-NPST kangaroo cook-INF-PURP

'The two men are digging a cooking trench in order to cook the kangaroo.'

(c) Ngarrka-ngku ka-palangu kurdu-jarra ngarri-rni maliki yampi-nja-ku.

man-ERG PRES-333 child-DUAL tell-NPST dog leave-INF-JUSS

'The man is telling the two children to leave the dog alone.'

(d) Jakamarra-rlu-ju jinjinyi-ma-nu warlu yarrpi-rninja-ku.[6]

Jakamarra-ERG-1 PV-verb-PST kindle-INF-JUSS

'Jakamarra ordered me to build a fire.'

The jussive usage represented by (117c-d) above is distinct from the purposive in one important respect. In (117c-d) the subject of the infinitive is construed with the object of the main verb. And this is a regular feature of transitive verbs of ordering, and the like, which can be said to *select* jussive infinitival complements. Purposive infinitivals, by contrast, are more variable in their construal. In (117a-b), the subject of the infinitive is construed with the subject, but it is possible for the subject of a purposive infinitival to be construed with an object in the main clause, given semantically appropriate conditions. Thus in (118) below, the subject of the infinitive may be — and in the most natural reading is — construed with the dative argument in the main clause:

(118) Karnta-ngku ka-rla kurdu-ku pangkarra yi-nyi jarda nguna-nja-ku.

woman-ERG PRES-rla child-DAT blanket give-NPST sleep lie-INF-PURP

'The woman is giving the child a blanket in order for it to sleep.'

It is quite probable that the difference here is not one of semantics at all, but rather one of syntax. The 'jussive' infinitival complement is evidently a structure of 'obligatory control' (cf. Chomsky and Lasnik 1977) — i.e. one whose subject is necessarily non-overt and is, moreover, necessarily construed with a stipulated argument of the verb which the jussive complements. The 'purposive' is evidently not a structure of obligatory control. A non-overt subject is freely construed, within the limits of semantic appropriateness. Moreover, the subject of a purposive may be overt and disjoint in reference from all main-clause arguments, as in:[7]

(119) Pangkarra-rna ka-ngu-rnu, kurdu jarda nguna-nja-ku.

blanket-1 carry-PST-HITHER, child sleep lie-INF-PURP

'I have brought a blanket in order for the child to sleep.'

Henceforth I will use the term 'jussive' to refer to ku-complements which are structures of obligatory control. And I will use the term 'purposive' for those which are not. I will adhere to this usage even where it is not strictly speaking consistent with the semantics involved. Thus, for example, I label the complement in (119) above 'jussive' even though the main verb there is not properly a verb of command.

Jussive infinitivals provide a dimension along which verbs are subcategorized, evidently. Thus some verbs, but not all, have the ability to select a jussive complement. The following is a partial listing of Warlpiri verbs which have this capability (the ellipsis in the translation corresponds to the complement):

(120)	(a)	kapakapa-jarri-mi	'ABS fail to ...'
		pinarri-jarri-mi	'ABS learn to ...'
		ngampurrpa-jarri-mi	'ABS develop desire to ...'
		jukuru-jarri-mi	'ABS lose desire to ...'
	(b)	kapakapa-ma-ni	'ERG prevent ABS from ...'
		pinarri-ma-ni	'ERG teach ABS to ...'
		jinyijinyi-ma-ni	'ERG order ABS to ...'

yaja-rni	'ERG enlist ABS to ...'
ngarri-rni	'ERG tell ABS to ...'
yilya-mi	'ERG send ABS to ...'
wangka-mi	'ABS tell DAT to ...'

It is apparently not necessary in Warlpiri to stipulate for each jussive-selecting verb, as an arbitrary feature of its entry in the lexicon, which of its arguments controls the subject of the infinitive. The controller is predictable according to the following principle: if the verb takes a single argument (list 120a above), its subject, naturally, will control the infinitive subject; but if the verb takes two arguments (list 120b,) its object will control. Thus the morphologically related intransitive and transitive verbs /kapakapa-jarri-mi/ and /kapakapa-ma-ni/ exhibit control by subject and object, respectively:

(121) (a) Walya kiji-rninja-ku ka-rna kapakapa-jarri-mi (ngaju); walya ka-ju pina-larrarlarra-nga-rni-rni.

earth throw-INF-JUSS PRES-1 fail-INCH-NPST (I); earth PRES-1 back-crack 2-verb-NPST-HITHER

'I am failing to throw the dirt out (of the well); it keeps caving back in here on me.'

(b) Nyuntulu-rlu ka-npa-ju (ngaju) kapakapa-ma-ni walya kiji-rninja-ku.

you-ERG PRES-2-1 (me) fail-CAUS-NPST earth throw-INF-JUSS

'You are preventing me from (succeeding in) throwing the dirt (out).'

In both of (121a-b) above, it is the absolutive argument in the main clause which controls the infinitive subject. It would, however, be a mistake to assume that this is the principle of control with jussives. Rather, with two-argument verbs, it is the 'object' — defined, presumably, in the same way as for auxiliary construal (see 13 in sec. 1)— which controls. Thus the dative object of /wangka-mi/ 'ABS tell DAT to ...' controls in the following sentence:

(122) Japangardi-ji (ngaju-ku) wangka-ja warlu ma-ninja-ku.

Japangardi-1 (me-DAT) speak-PST firewood get-INF-JUSS

'Japangardi told me to get firewood.'

The ku-complementizer can combine with pure nominals as well as with infinitivals. There are several ways in which this can come about. An absolutive argument within a purposive or jussive infinitival clause may take on the ku-complementizer, as an alternative to appearing in its normal unmarked, absolutive, form. This is seen most often in transitive infinitivals, as illustrated by the following alternatives to (117b) and (117d):

(123) (a) Ngarrka-jarra-rlu ka-pala parlku pangi-rni,
marlu-ku purra-nja-ku.

man-DUAL-ERG PRES-33 trench dig-NPST,
kangaroo-PURP cook-INF-PURP

'The two men are digging a cooking trench in order to cook the kangaroo.'

(b) Jakamarra-rlu-ju jinjinyi-ma-nu, warlu-ku
yarrpi-rninja-ku.

Jakamarra-ERG-1 PV-verb-PST, fire-JUSS kindle-INF-JUSS

'Jakamarra ordered me to build a fire.'

More commonly, a nominal may appear in combination with the complementizer outside of, and separated from, the remainder of the infinitival clause. Thus in (124) — an alternative to (123b) — the complementized nominal /warlu-ku/ is separated from the verb of the jussive expression by the verb of the main clause:

(124) Jakamarra-rlu-ju warlu-ku jinjinyi-ma-nu yarrpi-rninja-ku.

Jakamarra-ERG-1 fire-JUSS PV-verb-PST kindle-INF-JUSS

In constructions of this general sort — i.e. involving a complementized nominal in concert with a complementized infinitive verb — the nominal is understood to fulfill the function of the absolutive argument in the case array selected by the verb. That is to say, the nominal is construed with the absolutive position in the argument structure of the verb. Thus /warlu-ku/ (fire-JUSS) is the object of /yarrpi-rninja-ku/ (kindle-INF-JUSS in (124) above.

Extremely common, and of very great importance in Warlpiri speech, is what might be called the 'autonomous' use of complementized nominals, i.e. the use of nominal-plus-complementizer constructions in the absence of infinitives with which they can be construed. This usage is common to all complementizers; it is not limited to the purposive/jussive. I will refer to this as the 'vague predicational' use of complementized nominals. It is illustrated in the following:

(125) (a) Yapa ka-lu muku-ya-ni miyi-ki.

people PRES-333 all-go-NPST food-PURP

'The people are all going for food.'

(b) Ngaju-ka-rna jaru-ku kapakapa-jarri-mi.
I PRES-1 language-JUSS fail-INCH-NPST
'I fail at, make mistakes in, language.'

(c) Japangardi kapi-rna yaja-rni wirlinyi-ki.[8]
Japangardi FUT-1 enlist-NPST hunting-JUSS
'I will enlist Japangardi for hunting.'

(d) Nyuntu ka-rna-ngku kuyu-ku yilya-mi.
you PRES-1-2 meat-JUSS send-NPST
'I am sending you for meat.'

It is reasonable to think of the meaning of a vague predicational expression as being constructed by means of a special interpretive process which 'builds' the logical form of a sentence, in which the complementized nominal would correspond to the argument position associated with the absolutive and in which the verb is left unspecified, to range over the total set of meanings of verbs which could select the nominal. The relation of this abstract subordinate predication to other nominals present in the main clause would be determined in accordance with the very same principles which operate for overt infinitival complements — e.g. free construal for purposives, control for jussives, and so on. This scenario seems appropriate for the interpretation of autonomous complementized nominals generally, with the exception of the subtype represented by (125c) above. In the autonomous complement function, nominals like /wirlinyi/ 'hunting'; /wurna/ 'travel, going'; /wajili/ 'running'; and /jarda/ 'sleep' are not strictly speaking vague predicationals. They do not correspond to the absolutive argument of an abstract verb but rather to the verb itself. Thus in (125c), the complementized nominal /wirlinyi-ki/ (hunting-JUSS) is synonymous with the fully verbal form /wirlinyi ya-ninja-ku/ (hunting go-INF-JUSS), and the sentence is no less explicit without the verb than it would be with it.

The proposal that — with the exception just noted — the interpretation of an autonomous complementized nominal involves an abstract, semantically unspecified, verb in logical form is intended to capture the fact that the predication is indeed vague. Thus, for example, the purposive expression /miyi-ki/ 'for food' in (125a) above has a range of interpretations corresponding to, among many others, the following explicit infinitival expressions:

(126)	(a)	miyi nga-rninja-ku	'to eat food'
	(b)	miyi ma-ninja-ku	'to gather/obtain/buy food'
	(c)	miyi karla-nja-ku	'to dig food (e.g. yams)'
	(d)	miyi paji-rninja-ku	'to pick (lit. cut) food'
	...		

Of course, a 'normal' reading of a sentence like (125a) would involve a 'most general and typical collocation' such as (126a-b). Only in an extremely rich speech context would it be reasonable to impose a more specific reading, such as (126c-d), or a reading involving a less typical collocation like /miyi nya-nja-ku/ 'to see food' or /miyi yumpa-rninja-ku/ 'to sing the food (e.g. to sing a totemic ritual song pertaining to some vegetable species)'.

Sentences of the type represented by (124) above, in which a ku-complement appears to be 'split up', are most probably to be viewed as involving autonomous complementized nominals in concert with complementized infinitives. The existence of this alternative form of expression in Warlpiri is functional, in that it enables the speaker to foreground an argument of the infinitive verb by representing it as a constituent of the main clause. Thus the object of the complement verb is foregrounded in (124), while in (123d) it is subordinated within the complement expression. This use of complementized nominals to achieve the foregrounding effect is prominent in Warlpiri speech, but it will not be dealt with in detail here (see Nash 1980 for some discussion).

The ku-complementizer can be extended by suffix to form a 'desiderative' purposive or a 'prioritive' purposive. The suffixal combinations are as follows:

(127)	(a)	-ku-purda	desiderative
	(b)	-ku-ngarnti	prioritive

The desiderative is used to indicate that the individual corresponding to the subject of the infinitive desires, or intends, to carry out the action depicted in the infinitive clause. The prioritive is used to indicate that one event or condition (that of the main clause) is prerequisite to, or typically prior to, another (that of the infinitive clause). Unlike plain ku-complements, the desiderative and prioritive can be marked to agree in case with a main-clause argument with which they are in apposition — i.e. the main-clause argument with which a non-overt infinitive subject is construed. Examples of these more complex complementizers are given in (128) below:

(128) (a) Ngaju ka-rna Yalijipiringi-kirra ya-ni, pija nya-nja-ku-purda.

I PRES-1 Alice-ALL go-NPST, picture see-INF-PURP-DESID

'I am going to Alice Springs with the desire, or intent, of seeing a picture show.'

(b) Ngajulu-rlu ka-rna maniyi ma-ni, Yalijipiringi-kirra ya-ninja-ku-purda-rlu.

I-ERG PRES-1 money get-NPST, Alice-ALL go-INF-PURP-DESID-ERG

'I am getting money with the desire, or intent, of going to Alice Springs.'

(c) Kurdu ka karri-nja-pardi-mi, wangka-nja-ku-ngarnti.

child PRES stand-INF-arise-NPST, spear-INF-PURP-PRIOR

'The child is standing up prior to speaking.'

(d) Ngarrka-ngku ka parlku pangi-rni, marlu purra-nja-ku-ngarnti-rli.

man-ERG PRES trench dig-NPST, kangaroo cook-INF-PURP-PRIOR-ERG

'The man is digging a trench prior to cooking the kangaroo.'

In the vast majority of recorded instances of the desiderative and prioritive, the subject of the infinitive is construed with the subject of the main clause, whether that is transitive or intransitive. Thus these structures do not exhibit the control properties of the jussive. Nor are they in any sense 'selected' by the main verb as the jussive evidently may be. I therefore consider the desiderative and prioritive to be special subtypes of the purposive rather than of the jussive. Although the subject of the desiderative infinitival is in all recorded instances non-overt and construed with a main-clause argument, the prioritive has been observed with an overt subject, as in (129) below; hence the prioritive, at least, is not a structure of obligatory control:

(129) Mangkurdu ka-lu pardi-mi marumaru, ngapa wanti-nja-ku-ngarnti.

cloud PRES-333 arise-NPST black 2, water fall-INF-PURP-PRIOR

'Black rain clouds come up prior to its raining (lit. prior to rain falling).'

Like the simple purposive, the desiderative and prioritive purposives can appear on pure nominals. The following sentences illustrate this usage:

(130) (a) Ngaju-rna ya-nu-rnu miyi-ki-purda.

I-1 go-PST-HITHER food-PURP-DESID

'I have come desirous of food.'

(b) Japanangka-rlu ka-nyanu nantuwu ma-ni wurna-ku-ngarnti-rli.

Japanangka-ERG PRES-r horse get-NPST travel-PURP-PRIOR-ERG

'Japanangka is getting himself a horse prior to travel, as a prerequisite to travel.'

Often observed, but not yet adequately understood, is an additional form evidently related to the purposive. This involves the ending /-kurra/, perhaps related to the allative but possibly also just an extension (by an element /-rra/) of the ku-complementizer. It appears on infinitives of verbs of directional motion, and it expresses an intention, on the part of the individual corresponding to the infinitive subject, to begin going. This construction has been recorded only with a transitive main verb and in semantic apposition to the ergative subject thereof; it is therefore further marked for ergative case:

(131) (a) Jakamarra-rlu ka-ngalpa jakuru-pi-nyi ya-ninja-kurra-rlu.

Jakamarra-ERG PRES-122 PV-verb-NPST go-INF-PURP-ERG

'Jakamarra is taking leave of us (plural inclusive) with the intention of going.'

(b) Ngajulu-rlu ka-rna makiti ma-ni wirlinyi ya-ninja-kurra-rlu.

I-ERG PRES-1 gun get-NPST hunting go-INF-PURP-ERG

'I am getting the gun to go hunting.'

In addition to the purposive and jussive uses of the ku-complementizer, there is a much more restricted use of what is evidently the same ending on complements of certain verbs of linguistic communication, e.g. /ngarri-rni/ 'ERG tell ABS about ..., ERG tell ABS that ...'; /payi-rni/ 'ERG ask ABS about ...':

(132) (a) Napurrula-rlu-jarrangku ngarru-rnu pina-rni ya-ninja-ku, ngaka nganta kapi ya-ni-rni.

Napurrula-ERG-11 tell-PST back-HITHER go-inf-PURP, anon supposedly FUT go-NPST-HITHER

'Napurrula told us (dual exclusive) about coming back, i.e. (that) she will, according to her, come anon.'

(b) Yalumpu-rlu-ju ngarru-rnu pirrarni-rli, ngapa wanti-nja-ku nganta.

that-ERG-1 tell-PST yesterday-ERG, water fall-INF-PURP supposedly

'That person (nearby) told me yesterday that it was supposed to rain.'

(c) Yalumpu-rlu-ju ngarru-rnu, nyuntu nganta ya-ninja-ku; yi-npa nganta nyuntu ya-ntarla Yalijipirlingi-kirra.

that-ERG-1 tell-PST, you supposedly go-INF-PURP, COMP-2 supposedly you go-IRR Alice-ALL

'That person told me you were supposedly going, i.e. you were supposed to be going to Alice Springs.'

(d) Ngali-ngki kapi-rli payi-rni Jakamarra ngapa-ku yangka-ku.

we-ERG FUT-12 ask-NPST Jakamarra water-PURP that-PURP

'We (dual inclusive) will ask Jakamarra about that water hole.'

Unlike the jussive infinitival complements, these are evidently not structures of obligatory control, since the subject of the infinitive may be overt as in (132b-c). In (132a) the infinitive subject is construed with the main-clause subject. Since the verb there is /ngarri-rni/, a verb which selects jussive complements as well, the sentence is in fact ambiguous. The appended clause, following the comma, makes it clear that the jussive is not the reading which the speaker intends.

2.4 TENSE-RELATIVE COMPLEMENTIZERS: TEMPORAL COINCIDENCE

There exists in Warlpiri an important set of four endings whose shared semantic function is to indicate that one event (that depicted in the main clause) coincides in time with another (that depicted in the infinitive clause). That there are four endings, rather than just one, results from the fact that the set also encodes a somewhat elaborated system of 'obviation' or, as it is often called, 'switch reference' (cf. Jacobsen 1967, Munro 1980). Thus in addition to expressing temporal coincidence between main-clause and subordinate-clause events, the endings indicate whether or not a principal argument of the main-clause verb controls the subject of the infinitive and, if so, which one. The endings are tabulated below:

(133)	-karra	pure proximate (PROX)
	-ngkajinta ∿ -rlajinta	proximate reflexive (PROXr)
	-kurra	obviative of object control (OBVo)
	-ngkarni ∿ -rlarni	pure obviative (OBV)

The terminology employed in glossing these complementizers is adapted from that recently used in Uto-Aztecan linguistics (cf. Hale 1969, fn. 3; Voegelin and Voegelin 1975; Jeanne 1978) and is itself an extension, due to Charles Hockett (cited in Grimes 1967) of the traditional Algonquianist opposition known as 'obviation'. In this extended usage, obviation embraces the category termed 'switch reference' by William Jacobsen in his seminal paper on the phenomenon (Jacobsen 1967).

For our present purposes, the proximate (PROX) pole in the obviation dichotomy corresponds to the circumstance in which the subjects of the main and subordinate clauses are shared, or in our terms, the main-clause subject controls the subject of the infinitive. The obviative (OBV) pole in the opposition corresponds to the circumstance in which the subjects of the two clauses are distinct in reference. This binary opposition is evidently present in the Warlpiri system, but there are additional principles entering into it as well, giving rise to four, rather than just two, endings.

Tense-relative clauses marked by means of the ending /-karra/, which I have labelled 'pure proximate', are structures of obligatory control and, for most speakers at least, it is the subject of the main clause which controls — hence the classification of this ending as proximate. If the subject of the main clause is ergative, then the karra-clause is likewise marked ergative as in the final two examples below:

(134) (a) Ngarrka ka wirnpirli-mi, karli jarnti-rninja-karra.

man PRES whistle-NPST, boomerang trim-INF-PROX

'The man is whistling, while trimming the boomerang.'

(b) Napurrula ka-ju ngaju-ku wangka-mi, ngurlu kipi-rninja-karra.

Napurrula PRES-1 me-DAT speak-NPST, seed winnow-INF-PROX

'Napurrula is speaking to me, while winnowing mulga seed.'

(c) Ngarrka-ngku ka purlapa yunpa-rni, karli jarnti-rninja-karra-rlu.

man-ERG PRES corroboree sing-NPST, boomerang trim-INF-PROX-ERG

'The man is singing a corroboree, while trimming the boomerang.'

(d) Kurdu-ngku ka-rla ngapa-ku wapal-pangi-rni wangka-nja-karra-rlu.

child-ERG PRES-rla water-DAT search-dig-NPST speak-INF-PROX-ERG

'The child is digging in search of water while speaking.'

For at least one speaker whom I have consulted, it is not the case that the subject of a karra-infinitival is necessarily construed with the main-clause subject. Rather, it can be construed with the subject or the object; in either circumstance, the infinitival agrees in case with the controlling main-clause argument. For this speaker, karra-clauses are not properly termed 'proximate', since the main and subordinate clauses need not share subjects.

The ending /-ngkajinta ∿ -rlajinta/ is identical in form and allomorphy to the comitative case (see 2.1 above). Although I have not indicated this in hyphenation or in glossing, there is certainly an etymological connection between the first syllable of this ending and the locative case /-ngka ∿ -rla/. This connection, which also involves the initial syllable of the other obviously bipartite tense-relative complementizer /-ngkarni ∿ -rlarni/, may or may not be real from the point of view of the synchronic grammar of Warlpiri, but it is nonetheless understandable in light of the fact that these tense-relative endings express temporal coincidence, just as the locative expresses spatial coincidence.

In the vast majority of recorded instances, the ending /-ngkajinta ∿ -rlajinta/ is used where the subject of the infinitive is construed with the main-clause subject and where the latter, in turn, is co-referential with the main-clause object — that is to say, where the main clause is reflexive. Thus,

(135) (a) Ngarrka-ngku-nyanu rampari-paju-rnu, karli jarnti-rninja-rlajinta.

man-ERG-r mistake-cut-PST, boomerang trim-INF-PROXr

'The man accidentally cut himself while trimming the boomerang.'

(b) Ngajulu-rlu-rna-ju wirliya paka-rnu, watiya paka-rninja-rlajinta.

I-ERG-1-i foot chop-PST, tree chop-INF-PROXr

'I cut (chopped) myself on the foot while I was chopping the tree.'

This ending is not further extended by the ergative case, even though the subject of the infinitive is construed, partially at least, with an ergative main-clause subject. Although the usage just described prevails in recorded utterances and I have accordingly labelled the ending 'proximate reflexive', I do not wish to leave the impression that full understanding of this ending, or of the tense-relative complementizer system as a whole, has been achieved. Here as elsewhere in the study of Warlpiri grammar, an enormous amount of research remains to be done. In relation to the issue directly at hand, it should be pointed out that the use of the proximate reflexive is not obligatory where the main clause is reflexive. Thus consider (136) below, in which a pure proximate infinitival complements a reflexive main clause:

(136) Ngarrka-ngku ka-nyanu mapa-rni wangka-nja-karra-rlu.

man-ERG PRES-r rub-NPST speak-INF-PROX-ERG

'The man is rubbing himself (e.g. with red ochre) while speaking.'

Evidently the proximate reflexive requires that there be some direct connection between the action depicted in the infinitive clause and that depicted in the main clause; hence it is used in cases where the action of the infinitive clause could lead naturally to that of the main clause, as in the case of the mishaps described in (135a-b) above. The proximate reflexive would be out of place in (136), where mere temporal coincidence is involved.

The complementizer /-kurra/, identical in form to the allative case ending, forms tense-relative infinitivals which are controlled by the object of the main clause:

(137) (a) Ngarrka-ngku marlu pantu-rnu, marna nga-rninja-kurra.

man-ERG kangaroo spear-PST, grass eat-INF-OBVo

'The man speared the kangaroo (while it was) eating grass.'

(b) Kurdu-ngku ka karnta nya-nyi, ngurlu yurrpa-rninja-kurra.

child-ERG woman see-NPST, seed grind-INF-OBVo

'The child sees the woman grinding mulga seed.'

(c) Karnta ka-rla wangka-mi ngarrka-ku, karli jarnti-rninja-kurra-ku.

woman PRES-rla speak-NPST man-DAT, boomerang trim-INF-OBVo-DAT

'The woman is speaking to the man (while he is) trimming the boomerang.'

(d) Ngarrka ka-rla marlu-ku yura-ka-nyi, marna nga-rninja-kurra-ku.

man-ERG PRES-rla kangaroo-DAT PV-verb-NPST, grass eat-INF-OBVo-DAT

'The man is stalking the kangaroo (while it is) eating grass.'

(e) Ngarrka-ngku-rla-jinta marlu-ku pantu-rnu, marna nga-rninja-kurra-ku.

man-ERG-rla-jinta kangaroo-DAT spear-PST, grass eat-INF-OBVo-DAT

'The man shot at the kangaroo (while it was) eating grass.'

Note that the kurra-clause is marked for dative case where its subject is controlled by a dative object in the main clause, as it is in (137c-e). This is the practice in considered speech, but it is not strictly adhered to in spontaneous usage.

I have asserted here that the subject of a kurra-clause is controlled by a main-clause object. This is true, but it is misleading in that it leaves the impression that the principle of control here utilizes the same definition of the notion 'object' that has heretofore been in force, namely that embodied in the object construal principle expressed in (13) above. This is evidently not true, however. The controller of a kurra-clause must, it seems, be an object which is an integral part of the lexical argument structure of the main-clause verb. Specifically, the control properties of kurra-complements distinguish among dative arguments, unlike the construal principle of (13) which treats all datives uniformly as 'objects'. While an inherent dative may control the subject of a kurra-complement, an adjunct dative argument may not. Instead, where an adjunct dative controls, the 'pure obviative' ending is used (see below).

Infinitival complements in /-kurra/ are classified as obviative since their subjects are distinct in reference from those of the main clauses which they complement. This follows from the fact that the kurra-clauses are construed with main-clause objects, not subjects.

There is, however, one situation in which the subjects of the main and subordinate clauses may be co-referential. When the main clause is reflexive, a kurra-complement may be used provided certain semantic conditions are met, as in

(138) (a) Ngajulu-rlu-rna-ju purda-nya-ngu, ngungkurru-pangi-rninja-kurra.

I-ERG-1I hearing-see-PST, snoring-dig-INF-OBVo

'I heard myself snore.'

(b) Kurdu-ngku ka-nyanu nya-nyi, karri-nja-kurra.

child-ERG PRES-r see-NPST, stand-INF-OBVo

'The child sees himself standing (as in mirror or glass door).'

This usage is appropriate only where it is possible to think of the object of the reflexive main clause as in some sense 'disjoint' from the subject — e.g. where the object corresponds to an image or sound and therefore is not strictly speaking identical to the entity represented by the subject. Thus while the main clause in sentences like (138a-b) above is syntactically reflexive, it is perhaps not semantically so. Under this interpretation, the classification of /-kurra/ as obviative is, in fact, reinforced by these examples.

The ending which I have labelled 'pure obviative' — i.e. the bipartite /-ngkarni ∿ -rlarni/ whose initial portion corresponds in form and allomorphy to the locative — is used on tense-relative infinitivals whose subjects are not controlled by an argument of the main-clause, as in (139a-b) below. When the subject of the infinitival is overt, it is marked with a special 'subjective' ending (glosses SUBJ), identical in form to the dative case and to the purposive/jussive complementizer. If the infinitive verb is transitive and would therefore otherwise select ergative case on its subject, the subjective ending appears in place of, not in addition to, the ergative:

(139) (a) Ngarrka-ngku ka karli jarnti-rni, kurdu-ku maliki wajili-pi-nja-rlarni.

man-ERG PRES boomerang trim-NPST, child-SUBJ dog running-verb-INF-OBV

'The man is trimming a boomerang while the child is chasing the dog.'

(b) Nyalali-rli ka warlu yarrpi-rni, karnta-ku kurdu-ku miyi yi-nja-rlarni.

girl-ERG PRES fire kindle-NPST, woman-SUBJ child-DAT food give-INF-OBV

'The girl is building a fire, while the woman is giving food to the baby.'

This is not the sole use of the pure obviative complementizer, however. As mentioned earlier, an infinitival bearing this ending may be construed with an adjunct dative in the main clause. In this usage, of course, the subject of the infinitive is non-overt, being controlled by the adjunct dative:

(140) (a) Ngarrka ka-rla karnta-ku marlaja-wangka-mi, ngurlu yurrpa-rninja-rlarni(-ki).

man PRES-rla woman-DAT causal-speak-NPST, seed grind-INF-OBV(-DAT)

'The man is speaking, because of (or inspired by) the woman, while she is grinding mulga seed.'

(b) Ngarrka-ngku ka-rla kurdu wita-ku karli kaji-jarnti-rni, jarda nguna-nja-rlarni(-ki).

man-ERG PRES-rla child small-DAT boomerang benefactive-trim-NPST, sleep lie-NPST-OBV(-DAT)

'The man is trimming a boomerang for the little child while it is sleeping.'

The adjunct dative may be used for the specific purpose of foregrounding the subject of a pure obviative complement by permitting it to be overtly represented in the main clause. Thus the following two sentences can be understood as contrasting in just this way — the subject of the infinitival is foregrounded in (141a), while in (141b) it is subordinated within the infinitival complement:

(141) (a) Kurdu-ngku ka-rla jarntu warru-wajili-pi-nyi karnta-ku, miyi purra-nja-rlarni(-ki).

child-ERG PRES-rla dog around-running-verb-NPST woman-DAT, food cook-INF-OBV(-DAT)

(b) Kurdu-ngku ka jarntu warru-wajili-pi-nyi, karnta-ku miyi purra-nja-rlarni.

child-ERG PRES dog around-running-verb-NPST, woman-SUBJ food cook-INF-OBV

'The child is chasing the dog around, while the woman is cooking food.'

Sentence (141a) is open to a benefactive reading ('... chasing ... for the woman ...'), but it can also be interpreted as differing from (141b) only in terms of foregrounding. Where the complement is construed with an adjunct dative, it is possible to inflect it to agree in dative case therewith, though this is seldom done in normal speech.

Superfically close in meaning to the ending which I have labelled 'pure obviative' is a fifth-tense-relative ending /-puru/. This formative exhibits certain differences in behavior, however, which incline me to the view that it is not truly a part of the system tabulated in (133) above. As far as I know, puru-clauses are never linked with an argument of the main clause — i.e. their subjects are never construed with an argument there. This fact is evidently related to a somewhat subtle difference in meaning which separates /-puru/ from /-ngarni ∿ -rlarni/ and from the other tense-relative complementizers. The force of the four complementizers of (133) includes, in addition to the temporal coincidence which I have asserted to be the shared core of their meaning, a relationship between 'participants' (represented by the arguments in the main and subordinate predications) as well. This is evidenced by the fact that obviation is interwoven into the system. Even in the pure obviative, in cases where no participants are shared by the main and subordinate clauses, there is still a semantic relationship of sorts between participants — the pure obviative *counterposes* the activity of one actor to that of another. The system of (133) is, in short, not purely tense-relational. By contrast, puru-clauses seem to be *purely* tense-relational (and, accordingly, the ending is glossed TNSREL in illustrative examples). The event or condition depicted in a puru-expression simply identifies a time during which the proposition of the main clause holds. In fact, the most common puru-expressions are built upon infinitivals, or upon pure nominals, which describe conditions, of weather and the like, capable of serving as a situational backdrop for what is proposed in the main clause. The following sentences exemplify /-puru/:

(142) (a) Ngarrka-patu ka-lu yujuku-rla nyina-mi, ngapa wanti-nja-puru.

man-PL PRES-333 shelter-LOC sit-NPST, water fall-INF-TNSREL

'The men are sitting in the shelter while it is raining.'

(b) Wanta-puru ka-rna yama-ngka nyina-mi.

sun-TNSREL PRES-1 shade-LOC sit-NPST

'I sit in the shade when it is hot (lit. during the sun time).'

(c) Pirriya-puru ka-rna nyina-mi yuwarli-rla kaninjarni.
cold-TNSREL PRES-1 sit-NPST house-LOC inside
'I sit inside the house when it is cold.'

The contrast between the pure tense-relational /-puru/ and the obviative /-ngkarni ∿ -rlarni/ is made vivid by the observation that the latter ending could not be used — or at least would not normally be used — with an infinitival of the type represented in (142a) above. The pure obviative requires that the subordinate clause contain a subject which can be identified as the principal participant, or actor, of which the remainder of the clause is predicated. This follows from the fact that an integral part of the force of the pure obviate involves counterposing the activity of one actor to that of another. Although raining, as described by the Warlpiri locution, involves a subject nominal (i.e. /ngapa/ 'water, rain'), it does not, strictly speaking, involve a principal participant, or actor, in the required sense. The infinitive clause of (142a) describes a condition of weather, not an activity predicated of an actor. This may also explain why the subject of the puru-clause there does not bear the subjective ending /-ku/, as would the overt subject of a pure obviate clause (see 139a-b above). Thus it may be the case that the subjective ending appears on the grammatical subject of a tense-relational clause only if that argument is an actor in the correct sense. The subject of a puru-clause, like that of a pure obviate clause, may bear the subjective ending provided that this actor-predicate partitioning of the puru-clause is appropriate. However, I have recorded this only in elicited, as opposed to spontaneous, speech. The following is an example:

(143) Ngarrka-patu-rlu ka-lu-jana puluku turnu-ma-ni, karnta-patu-ku miyi purra-nja-puru.
man-PL-ERG PRES-333-333 bullock muster-CAUSE-NPST, woman-PL-SUBJ food cook-INF-TNSREL
'The men are mustering the cattle while the women are cooking the food.'

The five complementizers introduced in this subsection may combine with pure nominals as well as with infinitival clauses. The pure tense-relational /-puru/ is, in fact, most often observed in combination with nominals depicting environmental conditions, as in (142b-c) above. The four endings of (133) also figure prominently in the use of autonomous complementized nominals, but these depict concrete entities or activities rather than conditions of environment:

(144) (a) Ngarrka-ngku ka miyi nga-rni karli-karra-rlu.
man-ERG PRES food eat-NPST boomerang-PROX-ERG
'The man is eating food while occupied with the boomerang.'

(b) Kurdu-ngku-nyanu ramparl-paju-rnu kuyu-ngkajinta.

child-ERG-r mistake-cut-PST meat-PROXr

'The child cut itself by accident while occupied with the meat.'

(c) Yankirri-rna ngapa-kurra luwa-rnu.

emu-1 water-OBVo shoot-PST

'I shot an emu (while it was) occupied with the water.'

(d) Ngarrka-ngku ka-rla kurdu-ku karli kaji-jarnti-rni manyu-ngkarni(-ki).

man-ERG PRES-rla child-DAT boomerang benefactive-trim-NPST play-OBV(-DAT)

'The man is trimming a boomerang for the child (while it is) at play.'

The first three of these illustrate the 'vague predicational' usage described in the preceding subsection in connection with the purposive/jussive complementizer. In (144a), for example, the nominal of the karra-expression corresponds to the object in an abstract transitive predication whose verb is unspecified. The complementized nominal there could be used quite appropriately in reference to any of the predications more exactly described in explicit verbal form in (145) below, among others:

(145) (a) ... karli jarnti-rninja-karra(-rlu)

'... while trimming the boomerang'

(b) ... karli paka-rninja-karra(-rlu)

'... while cutting (chopping) the boomerang'

(c) ... karli mapa-rninja-karra(-rlu)

'... while rubbing the boomerang (with grease or ochre)'

(d) ... karli nguntu-pi-nja-karra(-rlu)

'... while vibrating the boomerang (to test its balance)'

And the presence in (144a) of the proximate ending /-karra/, together with the (essentially redundant) ergative case marking, indicates that the subject argument in the vague predication is construed with the subject of the main clause.

Analogous interpretive procedures would apply to the complementized nominals of (144b-c). In (144d), however, the complementized nominal itself denotes an activity and would, therefore, correspond to the predicate of the tense-relative expression — making the predicate explicit, rather than vague, just as would the explicitly verbal form /manyu-karri-nja-rlarni(-ki)/ '... while he/she is/was playing'.

The interpretations sketched above do not exhaust the readings assignable to complementized nominals of the type represented in (144) above. Not surprisingly, in view of the common use of space-time analogies, an ending belonging to the set (133) may express spatial, rather than temporal, coincidence between an argument in the main clause and the complementized nominal, provided the latter can denote a place. Sentence (144c) above, in particular, is especially open to this spatial reading: 'I shot an emu at the water hole.' In fact, the spatial reading is probably the favored one for that sentence. The identification of the 'figure' in this usage is governed by the same principle as that which governs the construal of the subject of an infinitival tense-relative clause. Thus, for example, the appearance of /-kurra/ in (144c) indicates that it is the object of the main predication that is to be identified as the figure, just as it is the main-clause object which controls the infinitive subject in the sentences of (137) above.

The prominence of the locative interpretation of autonomous nominal complements in /-kurra/ is quite possibly responsible for the fact that certain transitive verbs can actually be said to select them — in preference to 'true' locatives in /-ngka ∿ -rla/ — to designate the location of an entity denoted by the direct object during the time an action, depicted by the verb, is being performed on it. The verbs of the following sentences are evidently of this type:

(146) (a) Yarla kuja-ka-lu yirnmi-lki parri-paka-rni karli-ngki kurdiji-kirra, manya-ma-ni ka-lu-nyanu purlkapurlka-rlu.

yam REL-PRES-333 ripe-NOW PV-strike-NPST boomerang-INST shield-OBVo, soft-CAUSE-NPST PRES-333-r oldmen-ERG

'When they then beat up ripened yams with a boomerang in a shield, the old people (thereby) soften them up for themselves.'

(b) Yinjirrpi ka-lu nyurla-mi mardu-kurra manu parraja-kurra.

yinjirrpi PRES-333 knead-NPST bowl-OBVo and/or coolamon-OBVo

'They knead yinjirrpi (vegetable sp.) in a wooden bowl or in a coolamon.'

(c) Yunpayiyunpayi ka-lu puyu-pi-nyi pirli-kirra, manya-karda-nyayirni.

flax PRES-333 PV-verb-NPST stone-OBVo, soft-UNTIL-EXTREME

'They crush/pound (flowers of) native flax *(Calocephalus platycephalus)* on a stone until they are very soft (or fluffy).'

Tense-relative complementized nominals may also be used in concert with tense-relative infinitivals. The complementized nominals in the sentences of (147) below fulfill the object role in the argument structures of the infinitive verbs. Again, the availability of these 'split' complements permits an argument of a subordinated proposition to appear as a constituent of the main clause and, therefore, to be susceptible to foregrounding:

(147) (a) Jarntu-lpa kuyu-karra ngurra-ngka nguna-ja nga-rninja-karra.

dog-IMPERF meat-PROX camp-LOC lie-PST eat-INF-PROX

'The dog was lying in camp eating meat.'

(b) Marna-kurra-rna marlu luwa-rnu nga-rninja-kurra.

grass-OBVo-1 kangaroo shoot-PST eat-INF-OBVo

'I shot a kangaroo (while it was) eating grass.'

(c) Karli-ngkajinta-nyanu ngarrka-ngku ramparl-paju-rnu jarnti-rninja-rlajinta.

boomerang-PROXr-r man-ERG mistake-cut-PST trim-INF-PROXr

'The man accidentally cut himself while trimming the boomerang.'

(d) Miyi-ngkarni-lpa-rla purra-nja-rlarni kurdu-ngku jarntu wajili-pu-ngu karnta-ku.

food-OBV-IMPERF-rla cook-INF-OBV child-ERG dog running-verb-PST woman-DAT

'The child was chasing the dog while the woman was cooking food.'

Tense-relative complementizers are of considerable importance in Warlpiri usage, since the expressions which they mark bear a rather large portion of the expressive burden involved in the semantic subordination of one proposition to another. It is important to re-emphasize, however, that the system of four endings tabulated in (133) is by no means well understood. The precise conditions on their use remains somewhat elusive, as evidenced in part by the observed variability in the 'ambiguous' control situation represented by the reflexive, i.e. where the subject and object arguments of the main clause are identical. Another potentially ambiguous situation is presented by the two obviatives /-kurra/ and /-ngkarni ∿ -rlarni/, both of which can mark infinitival complements which are controlled by an object in the main clause. While observed usage normally conforms to the control principle asserted above — i.e. an inherent object controls a clause marked by /-kurra/, while an adjunct dative controls a clause marked by /-ngkarni ∿ -rlarni/ — at least one Warlpiri verb selects an inherent dative argument which can be used in concert with the pure obviative complementizer. The verb /parda-rni/ 'ABS wait for DAT' may co-occur with a pure obviative expression designating an activity in which the individual represented by the dative argument is engaged:

(148) Tiyi-ngkarni-ji parda-ka (ngaju-ku).

tea-OBV-1 wait-IMP (me-DAT)

'Wait for me while I (drink my) tea.'

It is not clear whether this is explainable in terms of some semantic principle or whether it should be regarded as an unpredictable lexical property of this verb that it may select a pure obviative complement.

2.5 TEMPORAL SUCCESSION

The complementizers discussed in the preceding subsection have in common a certain semantic property in regard to the relationship referred to as 'temporal coincidence'. The relationship there is one in which the time of one event (that of the main clause) is 'contained within' the time of another (that of the subordinate clause). It is not the case that one of the events precedes or follows the other — or, at least, that is not the temporal relationship that these complementizers primarily express. To the extent that it is possible, given the real-world nature of the events depicted, that of the main clause is *contemporaneous* with all or a part of that of the subordinate clause.

There is, in Warlpiri, an additional proximate tense-relative complementizer — namely /-rla/ (glossed PROX'), identical in form to the lateral-initial alternant of the locative (see sec. 2.1) — which relates activities on the part of a common actor, as does the pure proximate complementizer /-karra/ of the preceding subsection. Although /-rla/ can be used in the situation where the temporal relationship between events is that of containment — and, therefore, an infinitival complement in /-rla/ can paraphrase one in /-karra/ — this is not the predominant temporal relationship with which the ending is associated. There is another possible relationship between events which is properly included under the rubric of temporal coincidence, namely that in which one event immediately succeeds another. Here the termination of one event coincides temporally with the onset of another, to the extent that coincidence is possible, or natural, given the events and their real-world properties. It is this relationship of temporal *succession* which best characterizes the use of /-rla/. In this characteristic usage, the event of the complement clause is temporally prior to that of the main clause. Examples follow:

(149) (a) Ngarrka-ngku kuyu paju-rnu, junma ma-ninja-rla.

man-ERG meat cut-PST, knife get-INF-PROX'

'The man cut the meat, having gotten the knife.'

(b) Ngarrka-jarra-rlu-pala warlu yarrpu-rnu, parlku pangi-rninja-rla.

man-DUAL-ERG-33 fire kindle-PST, trench dig-INF-PROX'

'The two men built a fire, having dug a cooking trench.'

(c) Kurdu-ngku karnari wajili-pi-nja-rla puuly-marda-rnu.

child-ERG lizard running-verb-INF-PROX' PV-hold-PST

'The child chased the reticulated dragon (lizard sp.) and caught it.'

(d) Karnta yuka-nja-rla wangka-ja.

woman enter-INF-PROX' speak-PST

'The woman entered and spoke.'

Notice, incidentally, that infinitival complements in /-rla/ are not inflected for ergative case in agreement with a controlling ergative subject, as in (149a-c). In this respect, /-rla/ is formally distinct in its behavior from /-karra/ which regularly agrees with a controlling ergative subject.

The pattern represented by (149c-d) above is extremely popular in Warlpiri, particularly where the main and subordinate clauses share all arguments, as in these two sentences. The close succession of infinitive and finite verbs, in that order and without intervening intonational break, achieves an effect which is semantically more closely akin to co-ordination than to subordination. Thus the sentences of (149c-d) are reasonably close paraphrases of the following, in which parataxis is used to co-ordinate the predicates:

(150) (a) Kurdu-ngku karnari wajili-pu-ngu, puuly-marda-rnu(-lku).
child-ERG lizard running-verb-PST, PV-hold-PST(-THEN)
'The child chased the reticulated dragon and (then) caught it.'

(b) Karnta yuka-ja, wangka-ja(-lku).
woman enter-PST, speak-PST(-THEN)
'The woman entered and (then) spoke.'

Although it is somewhat difficult to make secure judgments on matters of this sort, it is my impression that in usages of the type represented by (149c-d) neither verb can properly be said to correspond to the main assertion of the sentence — rather, the two together co-operate to make a single assertion. In sentences like (149a-b), on the other hand, the finite clause is evidently the bearer of the main assertion.

The proximate complementizer under discussion here is identical to one of the alternants of the locative case. In the most natural use of this ending, it is impossible to be sure whether it is fully identical in its allomorphy to the locative because, unlike the complementizers discussed heretofore, it does not combine with pure nominal stems. It is therefore not possible to determine whether it has the velar-initial alternant /-ngka/ which would appear on a disyllabic nominal. Disyllabic infinitives exist, but they do not serve to reveal the velar-initial alternant since they are exceptional in taking the lateral-initial alternant, not only in combination with the ending of interest here (e.g. /pi-nja-rla/ (hit-INF-PROX'); /nya-nja-rla/ (see-INF-PROX'); etc.), but also in combination with endings which otherwise clearly mimic locative allomorphy (e.g. the initial syllables of the proximate reflexive and pure obviative endings: /pi-nja-rlajinta/ (hit-INF-PROXr), not */pi-nja-ngkajinta/; and /pi-nja-rlarni/, not */pi-nja-ngkarni/).

The above remarks apply to the PROX' ending in its characteristic and fully productive use as a tense-relative complementizer. As with certain other Warlpiri complementizers, this one also evidently has a specialized use as a part of the argument structure of certain verbs. In this function, PROX' exhibits fully the allomorphy of the locative, since it can combine with pure nominals as well as with infinitivals. At least two verbs are known to select the PROX' complementizer. These are /wirnki-jarri-mi/ 'ABS be/get busy at/on PROX'', and its near synonym /wartardi-jarri-mi/ 'ABS be/become preoccupied with PROX'', as in

(151) (a) Karli jarnti-rninja-rla-rna wirnki-jarri-ja.
boomerang trim-INF-PROX'-1 busy-INCH-PST
'I got busy at trimming the boomerang.'

(b) Karli-ngka-rna wirnki-jarri-ja.
boomerang-PROX'-1 busy-INCH-PST
'I got busy on the boomerang.'

(c) Yapa-jarra-rlu yi-lpa-ju-pala pura-nj-ina-nu,
ngula-ngka-rna wartardi-jarri-ja.
person-DUAL-ERG COMP-IMPERF-1-33 follow-INF-PROG-PST,
that-PROX'-1 preoccupied-INCH-PST
'As two people were following me along, I became preoccupied with that.'

Where the complement is an infinitival clause, as in (151a), the main-clause subject controls the subject of the infinitive verb, as expected of a proximate complementizer. It should be said of the usage exemplified in (151) above that it is by no means clear that it properly belongs to the realm of complementizers. It may well be that this is a specialized use of the locative case rather than of a homophonous, but synchronically distinct, PROX' complementizer. This, however, is simply a part of the larger question of the extent to which case-complementizer syncretism in morphological form should be taken to reflect synchronically real connections of one sort or another, as opposed either to accidental convergences or to the historical residue of once real, but no longer real, connections.

2.6 NEGATIVE PURPOSIVE AND ADMONITIVE EXPRESSIONS

The admonitive complementizer /-kujaku/ (ADMON) combines with infinitival clauses to express a 'negative purposive' relationship between events depicted in main and subordinate clauses. Specifically, it indicates that if the event of the main clause is instantiated, that of the complement clause will not be — or, to put it in a way which is more in tune with predominant usage, if the circumstance described in the main clause is realized, an otherwise likely (usually undesirable) event, depicted in the admonitive complement clause, will be circumvented:

(152) (a) Watiya-ngurlu jiti-ya, wanti-nja-kujaku.

tree-EL descend-IMP, fall-INF-ADMON

'Get down from the tree, so you don't fall.'

(b) Maliki ka-rna nyampu jirri-marda-rni, kurdu wita yarlki-rninja-kujaku.

dog PRES-I this restraining-hold-NPST, child small bite-INF-ADMON

'I am holding this dog, so that it doesn't bite the little child.'

(c) Wurdungu-jarri-yarla-lpa-rlipa, kurdukurdu yakarra-pardi-nja-kujaku.

silent-INCH-IRR-IMPERF-122, children awake-arise-INF-ADMON

'We should be quiet so the children don't wake up.'

(d) Murdukayi kapi-rna-ju ma-ni, wirliya ya-ninja-kujaku.

motorcar FUT-1-1 get-NPST, foot go-INF-ADMON

'I am going to get myself a car, in order not to (have to) walk on foot.'

The subject of the infinitival clause may be overt, as in (152c) above. Thus the admonitive, like the purposive, is not a structure of obligatory control. And further, as in the purposive, an overt subject in an admonitive infinitival is not marked by means of the special subjective suffix /-ku/ as it would be in a pure obviative clause, for example (see sec. 2.4). Evidently this special ending is restricted to the subjects of tense-relative infinitivals.

In (152c) above, the overt subject is unmarked or absolutive, as is proper in an intransitive clause. In (153) below, the verb of the infinitival clause is transitive; hence the subject is expected to be in the ergative. However, for some speakers it is possible, optionally, to omit the ergative ending from an overt subject in an infinitive clause, even if ambiguity could result:

(153) Ngarrka-ngku ka kurdu ngamirlji-rla marda-rni, jarntu(-ngku) yarlki-rninja-kujaku.

man-ERG PRES child embrace-LOC hold-NPST, dog(-ERG) bite-INF-ADMON

'The man is holding the child in his embrace, so that the dog won't bite it.'

With retention of the ergative ending, the overt nominal in the admonitive clause of (153) is unambiguously associated with the subject relation with respect to the infinitive verb, while the non-overt argument bears the object relation within the admonitive clause. But if the ergative were omitted, as is allowed by some speakers, the inverse association of grammatical relations would become available as a possible alternative reading of the admonitive clause — albeit a reading which is contextually unlikely in this instance. Given the appropriate context, of course, an unmarked overt nominal in a transitive infinitival would most readily be associated with the object relation, as in (152b) above, for instance.

The admonitive ending combines readily with pure nominals, as in the following sentences exemplifying the use of autonomous complementized nominals to represent situations circumvented or avoided through successful realization of an action depicted by the verb:

(154) (a) Kurdukurdu ka-lu muku-yuka-mi-rni ngapa-kujaku.

children PRES-333 all-enter-NPST-HITHER water-ADMON

'The children are all coming in out of the rain (i.e. to avoid the rain).'

(b) Warlu kapi-rna-ju yarrpi-rni pirriya-kujaku.

fire FUT-1-1 kindle-NPST cold-ADMON

'I am going to build myself a fire against (to avoid, ward off) the cold.'

(c) Wurnturu-jarri-ya warlu-kujaku.

far-INCH-IMP fire-ADMON

'Move away from the fire (to avoid getting burnt).'

It would appear that the admonitive ending is bipartite, like the prioritive and desiderative purposives, for example (see sec. 2.3), with an initial portion consisting of an element /-ku/. And this would make sense if the admonitive is in fact related to the purposive, as suggested by the locution 'negative purposive' which I used in describing its meaning. But if this association is correct, it is not altogether perspicuous. The second portion of the ending, /-jaku/, offers no assistance in this matter since it is unknown outside this combination. There is phonological evidence both for and against bipartite structure for the ending. When combined with an infinitive, the admonitive complementizer receives a secondary stress on the penultimate syllable (e.g. [nyánjakujàku] 'in order not to see, be seen'; [wántinjàkujàku] 'in order not to fall') which is precisely what would be expected if the ending were to be analyzed /-ku-jaku/ — i.e. with the subsequence /-jaku/ constituting a separable element. (Compare the stressing on the more obviously bipartite endings exhibiting the parallel syllabic structure: the prioritive [-kungàrnti], the desiderative [-kupùrda], the proximate reflexive [-rlajìnta ∿ -ngkajìnta], etc.) But when combined with a nominal, the admonitive ending receives antepenultimate secondary stress (e.g. [wárnakùjaku] 'in order to avoid the snake', [pírriyakùjaku] 'in order to avoid the cold'); this is the stressing expected on an unanalyzable trisyllabic ending (cf. /-wardingki/ [-wàrdingki] 'inhabitant of ...'; /-ngawurrpa/ [-ngàwurrpa] 'denizen of ...'; /-puraji/ [-pùraji] 'your (relation)'; etc.).

Semantically, also, there is room for doubt about a genuine synchronic connection between the admonitive and the purposive. While the admonitive construction is used readily in situations to which the negative purposive interpretation is entirely appropriate, there is another sense associated with it — this is the meaning, in fact, which is responsible for the adoption of the term 'admonitive' (cf. O'Grady 1964). The admonitive, widespread among Australian languages, is used to sound a warning, as in the utterances of (155) below, in which the admonitive construction (whether nominal-based or infinitive-based) is used independently, unaccompanied by a main clause:

(155) (a) Warna-kujaku
snake-ADMON
'Beware of the snake!'

(b) Maliki-kijaku
dog-ADMON
'Beware of the dog!'

(c) Wanti-nja-kujaku.

fall-INF-ADMON

'Beware of falling!'
'Careful, lest you fall!'
'Careful, lest it fall!'

It is, of course, not difficult to see the connection between the admonitive sense and the negative purposive sense. The admonitive expression, in this warning usage, corresponds to a potential calamity which could be avoided by taking appropriate evasive action — e.g. action such as that which is expressed overtly in the imperative main clause of (154c) above. The reality of this connection does not, however, answer the question as to whether there is also a connection, in the synchronic grammar of Warlpiri, between the admonitive complementizer and the purposive complementizer discussed in section 2.3.

A nominal-based admonitive expression may be used in concert with an infinitival one to produce a split admonitive construction, analogous to split purposive and tense-relative complements. The nominal in the split complement is not restricted to a particular grammatical relation with respect to the infinitive verb. In (156a) below, the complementized nominal bears the subject relation to the infinitive, while in (156b) it bears the object relation:

(156) (a) Ngarrka-ngku ka-nyanu pirriya-kujaku yarrpi-rni
warlu, karlpi-nja-kujaku.

man-ERG PRES-r cold-ADMON kindle-NPST fire,
chill-INF-ADMON

'The man is building himself a fire against the cold,
so that it won't chill-hurt him.'

(b) Yapa-kujaku jirri-marda-ka maliki yalumpu,
yarlki-rninja-kujaku.

people-ADMON restraining-hold-IMP dog that,
bite-INF-ADMON

'Hold that dog away from the people, so it won't
bite them.'

An argument of the infinitive which is not overtly represented by a nominal — e.g. as a part of the infinitival clause itself or as a complementized nominal — can be understood as co-referential with an argument of the main verb; and this is the normal interpretation where possible. Thus, for example, the missing object of the infinitive verb in (156a) is normally understood as being co-referential with the main-clause subject, and the missing subject of the infinitive in (156b) is most readily understood as co-referential with the main-clause object.

At least one verb in Warlpiri can be said to select the admonitive as an alternative case marking on one of its arguments. The verb /lani-jarri-mi/ 'ABS fear, be afraid' may optionally appear with an argument designating the source of fear; that argument is typically in the dative, but the admonitive is an acceptable alternative. In this usage, the admonitive conforms to the behavior expected of a semantic case in that it is not construed with, or registered in, the auxiliary. Hence the formal contrast between the dative and the admonitive below, with registration by /-rla/ in the former but not in the latter:

(157) (a) Kurdu ka-rla lani-jarri-mi warna-ku.
child PRES-rla afraid-INCH-NPST snake-DAT

(b) Kurdu ka lani-jarri-mi warna-kujaku.
child PRES afraid-INCH-NPST snake-ADMON
'The child is afraid of the snake.'

3. CONCLUDING REMARKS

The foregoing sections are intended as an introduction to certain basic aspects of Warlpiri verbal clauses. Much is left out of this account, partly because it is not yet understood and partly because it is covered elsewhere. To get a fuller picture of Warlpiri grammar, the reader is encouraged to consult other papers and essays. The structure of the auxiliary and the system of AUX-VERB agreement can be found in Hale 1973 and Nash 1980. An introduction to the adjoined subordinate clause, which shoulders a large portion of the expressive burden corresponding to that shouldered by the embedded finite clause in English, etc., is to be found in Hale 1976. Discussions of phonology are to be found in Jagst 1975 and Nash 1980, and detailed comments on Warlpiri morphology are given in Nash 1980. Brief comments on the negative can be found in various ones of the above-mentioned works. While much remains to be done, the above works, together with the present paper, will serve to give the reader some idea of most areas of Warlpiri grammar.

FOOTNOTES

1. I am pleased to dedicate this paper to the memory of Lothar Jagst. Although I was never able to meet Lothar personally, I feel that I knew him well, not only from his writings and through correspondence, but most of all through Warlpiri people who knew him and had great affection for him.

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None of the people mentioned in this footnote are to be held responsible for errors which I have made.

2. Such sentences as these, while strictly speaking grammatical and in fact observed in discourse, sound naked and rather unacceptable in isolation. They can be improved in a variety of ways — including, for example, the addition of the enclitic /-ju/, often used stylistically (adding a rhythmic extra syllable) but also to mark the 'topic' of discourse (in the sense of 'old information'). Thus, for example: /Ngajuju mata./ 'I am tired'; /Nyuntuju wati./ 'You are a man'.

3. Although it has been recorded in natural speech, some Warlpiri speakers reject double registration in sentences of the type represented by (49). It is quite possible that this usage is in fact ungrammatical.

4. Many speakers flatly reject extensions of /-ngurlu/ by grammatical cases, and therefore they reject sentence (91b) as ungrammatical. All speakers, however, will permit such extensions of elative expressions formed with the alternant /-jangka/.

5. Although I am quite certain that I recorded this sentence (from natural speech, on tape) correctly, it is considered to be stylistically unacceptable without the enclitic /-ju/ (see note 2 above) on the word /ngula/: thus ... ngulaju pina.

6. The form /jinjinyi-ma-nu/ in (117d) is short for /jinyijinyi-ma-nu/.

7. This may be incorrect, since some speakers have rejected this sentence. Further research is needed here. It may turn out that purposives are structures of obligatory control after all, or that a more sensitive subdivision of what I have here called 'purposives' must be recognized, some being structures of obligatory control, others not. For speakers who reject (119), the intent of the infinitival can be expressed with the 'corresponding' finite, adjoined clause in /yungu-/; thus, /..., yungu kurdu jarda ngunami./ ' ..., in order that the child sleep'. See Hale 1976 for a discussion of adjoined subordinate clauses.

8. Sentence (125c) has an alternant with /wirlinyi-kirra/ rather than the jussive /wirlinyi-ki/; and it may well be, for some speakers at least, that the simple jussive is ungrammatical here.

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